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Missouri Medicine

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97th Annual Session, Kansas City, March 27-30, 1955

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March 27-30, 1955

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Control of Venereal Disease—E. M. Cannon, St. Louis, Chairman (1955); William B. O'Connor, St. Joseph (1957); James C. Cope, Columbia (1956); Charles C. Dennie, Kansas City (1956); A. W. Neilson, St. Louis (1955). **Associate Members**—R. J. Murphy, Kansas City; W. L. Davis, Charleston.

Industrial Health—H. M. Roebber, Bonne Terre, Chairman (1957); Albert H. Muench, St. Joseph (1957); S. W. Scorse, Joplin (1956); Vencel W. Hollo, St. Louis (1955); F. L. Feierabend, Kansas City (1955).

Diabetes—William H. Olmsted, St. Louis, Chairman (1955); Charles M. Lamke, Columbia (1957); Henry E. Oppenheimer, St. Louis (1957); Lucien W. Ide, St. Joseph (1956); Ira C. Layton, Kansas City (1955). **Associate Members**—Vincent J. LoPiccolo, St. Louis; Robert E. Koch, Clayton; Ralph H. Jones, Marshall; Byron M. Stuart, Boonville.

Anesthesiology—Merritt H. Kimball, Kansas City, Chairman (1955); Carl K. Ness, St. Joseph (1957); W. W. Tillman, Springfield (1957); R. M. S. Barrett, St. Louis (1956); Joseph A. McNearney, Richmond Heights (1955). **Associate Member**—O. T. Blanke, Joplin.

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Laboratory Medicine—Richard V. Riddell, St. Joseph, Chairman (1956); B. C. Portuondo, St. Louis (1957); Henry C. Allen, St. Louis (1956); Omer E. Hagebusch, St. Louis (1955); Jack H. Hill, Kansas City (1955).

Special Committees

Tuberculosis—Paul Murphy, St. Louis, Chairman; I. J. Flance, St. Louis; E. E. Glenn, Springfield; Laurence E. Wood, Kansas City; J. L. Mudd, St. Louis; C. A. Brasher, Mount Vernon; W. P. McDonald, St. Joseph; F. E. MacInnis, Kansas City; H. L. Greene, Hannibal. (1955.)

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Rural Medical Service—A. E. Spelman, Smithville, Chairman; Francis L. Kozal, Belle; W. A. Broyles, Bethany; W. J. Shaw, Fayette; Joseph C. Creech, Troy; Charles H. Lewellen, Louisiana; C. A. McBurney, Slater; A. J. C. McCallum, Aurora; John J. Killion, Portageville.

Physical Medicine—D. Elliott O'Reilly, St. Louis, Chairman (1955); Herbert A. Hamel, Kansas City (1957); Horace E. Thomas, Columbia (1957); R. A. Ritter, Cape Girardeau (1955); Luke A. Knese, St. Louis (1956).

Curiosa et Trivia

William B. McCunniff, M.D.

The first recorded blood transfusion was in 1490. The dying Pope Leo VIII was transfused with whole blood from three small boys. The recipient and all three donors died.

Young children account for almost all the victims of lead and kerosene poisoning.

Argument for socialized medicine: ". . . and had spent all that she had on physicians . . . and was nothing bettered . . . but she rather grew worse . . ." But not a New Deal source—this from St. Mark, 5:26.

Smithsonian Institute founder James Smithson, to the five doctors who couldn't diagnose his fatal ailment: "Perform an autopsy to discover what is the matter with me, for I am dying to know what my ailment is myself."

At 420 Main St., Bethlehem, Pa., still open for business, is "The Apothecary." This first American drugstore, founded in 1741, still uses the original counter, and has continuous ℞ record from 1743.

Mrs. A. Goodwin of Sidney, Australia, had twin boys born 56 days apart. The first was born December 16, 1952, and the second on February 10, 1953.

First item in Sir William Osler's first account book: "Speck in cornea—50c"

About 2,200 lives are lost per year in the U. S. due to firearm accidents—and the majority of these accidents occur at home rather than while hunting.

Half of the abdominal operations performed on patients over seventy are on the biliary tract.

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Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

The American Association of Anatomists and the Federation of American Societies for Experimental Biology held their annual meetings in St. Louis, on December 28-30. Addresses were delivered in memory of Dr. S. Wier Mitchell and of Dr. Charles S. Minot.

Madison County Medical Society earns the distinction of being the first to pay the state assessment for every member for 1915. The president of the society is Dr. William Nifong, Fredericktown, and the secretary is Dr. S. C. Slaughter.

Dr. Leo Leob, pathologist of the Barnard Free Skin and Cancer Hospital, St. Louis, will sever his connection with the institution, his resignation to take effect April 1, 1915.

Dr. J. J. Houwink, St. Louis, has been appointed consul for the Netherlands. He is a native of Amsterdam and has practiced medicine in St. Louis for twelve years.

Dr. W. H. Hays, Hannibal, was severely injured last month by the accidental discharge of a gun carried by his companion while on a hunt on Bay Island.

Dr. George A. Nash, Maryville, is recovering after an operation for appendicitis.

The Carter-Shannon County Medical Society resolved that, "The increased cost of living justly entitles doctors to charge higher fees for their services than formerly."

TWENTY-FIVE YEARS AGO

Judge C. T. Hays, in the Hannibal Court of Common Pleas on December 12, 1929, by upholding the rule of the board of control of Levering Hospital of Hannibal, Missouri, that only reputable physicians licensed to practice medicine and having a recognized degree of Doctor of Medicine be permitted to treat patients in the hospital thus excluding all irregular and sectarian practitioners, has materially strengthened the position maintained by all private hospitals that they have the right to decide what sort of physicians shall be permitted to treat patients in the hospitals.

Dr. Russell L. Haden, Kansas City, and Dr. Joseph Colt Bloodgood, were presented with the gold medal of the Radiological Society of North America, at its fifteenth annual meeting in Toronto, December 2, 1929. This honor was bestowed upon Dr. Haden for his research work in the x-ray study of dental infection. Dr. Bloodgood, clinical professor of surgery at Johns Hopkins University School of Medicine, was given the award for his work in the study of bone malignancy, its diagnosis and treatment by x-ray and radium. Only eighteen persons have been awarded the Radiological Society's gold medal, including Mme. Curie, of France.

The books entitled "Fear" and "Victim and Victor," by John Rathbone Oliver (The Macmillan Co., N. Y.), are recommended. It is predicted that the reader of these volumes will decrease the consumption of pills by one fourth, and will reveal any reader to himself.

On November 2, 1929, the new McCune Brooks Hospital at Carthage was formally opened. Dr. Everett Powers, Carthage, presided, and Dr. L. B. Clinton, Carthage, acted as toastmaster. The principal speaker was Dr. Jabez N. Jackson, Kansas City, former president of the American Medical Association. Dr. H. L. Kerr, Crane, president of the State Board of Health, also addressed the meeting. The hospital was made possible through the gift of $75,000 by the late Colonel John C. Guinn, Carthage, which sum was duplicated by a city bond issue.

TEN YEARS AGO

"Some Remarks on Coronary Sclerosis" by Robert Uhlmann, M.D., a timely article in the November 1944 issue.

1945 is x-ray's semicentennial. In 1895 immortal fame was brought to modest William Conrad Roentgen, University of Wurzburg physicist. Instinctively a scientist, he investigated a phenomenon of light observed while experimenting with an electrically charged vacuum tube.

Dr. J. Archer O'Reilly, St. Louis, was given a citation and medal for distinguished service to crippled children throughout the country during the twenty-second annual meeting of the National Society for Crippled Children in Chicago in October.

Florence Eva Dillan died suddenly at an Indianapolis Hospital on October 12. Miss Dillan had reported the Annual Sessions of the Missouri State Medical Association for many years.

Elmer Bartelsmeyer, St. Louis, Executive Secretary of the Missouri State Medical Association from 1933 to 1942, died November 18.

Herman Elwyn Pearse, M.D., Bonner Springs, Kansas, a graduate of the St. Louis College of Physicians and Surgeons, 1888; past president of the Missouri State Medical Association and the Jackson County Medical Society; died June 10; aged 84.

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Missouri Academy of General Practice

A Doctor's Thanksgiving

(Since Thanksgiving, Christmas and New Years are all times of thanksgiving, the following is reprinted by permission from News and Views.)

Being grateful for life and its blessings is one of man's earliest thoughts. At this season of harvest and abundance when the spirit of thanksgiving is in the air, I feebly record some reasons—personal and perhaps selfish—for my gratitude.

For the early incentive urge, which must have begun in a previous existence, and the determination to become a doctor; for sympathetic and encouraging parents; for the physical health and strength which made it possible to have attained a degree in Medicine and to have practiced for more than a generation; for a wife who is thoroughly understanding and bears with patience and fortitude the irregularities of my home life; for having a son who will possibly grow up to be a doctor who, remembering my professional shortcomings, will realize that the medical profession is a challenge and will profit by the mistakes, the trials, and the errors that constitute every doctor's life,—I am truly grateful.

For having become a general practitioner after having been trained in one of the specialties and, as a consequence, being able to share the common aspirations and problems of the true physician; for having watched the general practitioner regain his rightful position of dignity in the profession through the American Academy of General Practice; for seeing medical schools and hospitals create better physicians through general practice sections in their curricula; for having been active in the profession while scientific medicine advanced from its comparative infancy to the modern, miraculous medicine of today; for being exposed to medical politics enough to have been an active participant without having become seriously involved; for the patients whose belief in me is my daily inspiration, and for those who do not consider me an automaton who needs neither rest, sleep, food,—nor remuneration; for an understanding of the Code of Ethics and the principles of the Hippocratic oath sufficient to have made my life pleasurable in their application,—I am thankful.

(Continued on page 10)

Crossroads Comment

Peter V. Siegel, M.D.

Dear Aunt Helen:

Hope you don't mind if I write to you from now on. Seeing how Uncle Ted isn't with us any longer I sorta feared if I just wrote to the Editor and didn't use my family influence I just might not get in the print. You know Uncle Ted was my favorite Unk and we are all gonna miss him.

Thought you might be interested to know that I was in the city a couple weeks ago smartening up a bit. Before I left I was convinced, along with several of my neighbors, that maybe we wernt the only ones what could stand a little. Some of the speakers could use a pill or two on the subject of the private practice of medicine.

Our table was just getting our platters while the rest were picking their teeth and getting started on the program. It wasn't any surprise because just as sure as the sun comes up you know what it will be. Incidentally, that hotel must be owned by doctors but then there aint nothing in the code that prevents that. The head of the mothers and babies department from one of our neighboring state universities was asked a question concerning what to do with an eighteen year old amenorrheic girl. He made a couple of supercilious remarks that I suppose were funny since we all laughed and then ended the discussion by saying that he would go on to the next patient.

Gal!! If it was only that easy. What if she wasn't married and didnt expect to get in the family way? And what if I don't have stock in the Kotex Company. But she, or her Mother, does care or they wouldnt be in the office. She probably never heard of ovulation so she couldnt be expected to come in and inquire if she did or didnt, as this character seemed to think she ought to. I found out a long time ago that when I just go on to the next patient they even more promptly go on to the next doctor.

Like I have said before, there are some things about the practice of medicine that you just dont learn in school or at medical meetings.

Yours from the Crossroads,

Pete

Meat...

in Geriatric Nutrition

Although the nutrient needs for optimal health in the aged are not known to differ significantly from those in younger adults,[1] it has been shown that the daily protein requirements in elderly patients vary from person to person. Ascertained values range from below to above allowances recommended for persons in earlier years of adulthood.[2]

According to criteria such as "physical activity, gastrointestinal structure and function, pathologic disturbances, and chemical balances," it is suggested that an optimal diet for the elderly patient should provide at least 20 per cent of its calories in the form of protein.[3]

For several reasons this high intake of protein appears desirable. Decreased activity in the aged tends to induce loss of tissue protein. Preservation of protein enzymes and of endocrinal harmony necessary for supporting anabolic processes requires adequate protein nutrition. Also, the aged person usually is able to handle the end products of protein metabolism satisfactorily.

Generous amounts of tender lean meat can go a long way in supplying the needs of the aged for top quality protein. From 25 to 30 per cent or more of cooked lean meat is protein. Other valuable contributions include the B group of vitamins and essential minerals, especially iron, phosphorus, and potassium. The easy and almost complete digestibility and the palate appeal of meat constitute physiologic values important in the nutrition of the geriatric patient.

---

1. Sebrell, W. H. Jr., and Hundley, J. M.: Malnutrition, in Stieglitz, E. J.: Geriatric Medicine, Medical Care of Later Maturity, ed. 3, Philadelphia, J. B. Lippincott Company, 1954, chap. 13.
2. Ohlson, M. A.; Roberts, P. H.; Joseph, S. A., and Nelson, P. M.: Nutrition and Dietary Habits of Aging Women, Am. J. Pub. Health *40*:1101 (Sept.) 1950.

   Albanese, A. A.; Higgons, R. A.; Vestal, B.; Stephanson, L., and Malsch, M.: Protein Requirements of Old Age, Geriatrics *7*:109 (Mar.-Apr.) 1952.

   Roberts, P. H.; Kerr, C. H., and Ohlson, M. A.; Nutritional Status of Older Women; Nitrogen, Calcium, Phosphorus Retentions of 9 Women, J. Am. Dietet. A. *24*:292 (Apr.) 1948.

   Kountz, W. B.; Hofstatter, L., and Ackermann, P.: Nitrogen Balance Studies in Elderly People, Geriatrics *2*:173 (May-June) 1947.

   Kountz, W. B.; Hofstatter, L., and Ackermann, P. G.: Nitrogen Balance Studies in 4 Elderly Men, J. Gerontol. *6*:20 (Jan.) 1951.
3. Freeman, J. T.: Clinical Correlations in Geriatric Nutrition, J. Clin. Nutrition *1*:446 (Sept.-Oct.) 1953.

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

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The Hill-Burton Act—Its Achievements and Amendments

Since the original passage of the Hill-Burton Act in 1946 a significant amount of hospital and allied construction has taken place. The Federal government has paid out approximately six hundred million dollars which has been matched by about one and one fourth billion dollars in state and local funds.

As a result of these expenditures, 106,000 hospital beds have been built in this country. Eighty-six thousand of these were general beds, 11,000 mental, 6,000 tuberculosis and 3,000 chronic disease. A review of state surveys indicates that 70 per cent of the need for general beds has been met, while only a small percentage of the need for chronic disease and psychiatric beds has been met.

During the last session, as a result of extensive hearings before committees, Congress saw fit to amend the Hill-Burton Act by adding new parts E, F and G to the original Title VI.

It is thought that Congress amended the Hill-Burton Act as a result of having become aware of the medical needs arising from increased longevity and its attendant susceptibility to deteriorating or chronic disease on the part of the general public. The amendment to the Hill-Burton bill stresses the building of hospitals for the chronically ill, nursing homes, rehabilitation facilities and diagnostic and treatment centers. It is hoped that a new interest will be generated by this amendment which will tend to create a broader base for the treatment of the general public. As chronic disease hospitals, nursing homes and diagnostic and treatment centers are built throughout the country, there should be some relief of the pressure on general hospitals for the care of the chronically ill. It is hoped also that with the building of additional nursing homes, individuals will be transferred from existing institutions for the chronically ill to these new convalescent facilities, thus relieving much of the pressure now on hospitals for the chronically ill. It is hoped that it will also result in a more equal distribution of financial burden throughout the portions of our population which are ailing. Cost for care in general hospitals averages about $18.00 per day, while the cost for care in institutions for the chronically ill averages only a little more than $6.00 per day and care in nursing homes is even less expensive. It is also a possibility that certain persons now treated as inpatients might be treated on an ambulatory basis were diagnostic and treatment centers available to them.

There is a good possibility that the long range program envisioned by the amendment to the original Hill-Burton Act should permit a beneficial redistribution of patient load. This will be particularly true in the old age and chronically ill groups.

With the passage of the amendment to the Hill-Burton Act late in the year of 1954, Congress saw fit to appropriate twenty-one million dollars for the balance of this year for the building of those institutions permitted under Sections E, F, and G. It is thought that this amount may well be increased during the next two years.

From the Bureau of Hospital Facilities.

Missouri Academy of General Practice

(Continued from page 8)

For having been born an American, and thereby invested with a national heritage comparable to none within the experience of man; for the privilege of numbering among my patients those from other countries who are now good Americans and who instill within me a greater patriotism; and for a Government in which all thinking citizens and a majority of voters still believe the American Way of medicine is best,—I am grateful and obliged.

For the faculty of continued wonderment, which keeps alive my interest not only in things medical but in the wisdom of the larger world and the laws of the universe; for having lived long enough to have known the excitement of early professional life, the satisfaction of maturity, and possibly some of the rewards which come with the inevitable period of detachment; and for having developed a philosophy of life which is conducive to repose—I am eternally grateful.

N. J. EVERSOLL, M.D.

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Woman's Auxiliary

Mrs. W. E. Martin, *President*

For a number of years our Auxiliary has been doing much public relations to keep medicine free from Government control. We did much to help people understand that voluntary health insurance was the American way to solve medical bills. Now, we are giving money, informing ourselves and the public about the American Medical Education Foundation so that our seventy-nine medical schools may be able to maintain their high standards without government aid. The Woman's Auxiliary to the American Medical Association in June 1951 pledged to "give whole-hearted support to the program of the A.M.E.F." We women of the Auxiliary are making every effort to obtain some small contribution from all Auxiliary members through their county and state groups. The A.M.A. Auxiliary has contributed $10,000 from its budget in 1952 and 1953 and, in 1954, 10 per cent of its income was given; also the Corrine Freeman Fund of $2,499.00 was added to the gift. During 1953-54 generous contributions from many hard working state auxiliaries amounted to $36,707.00.

Missouri Auxiliaries and members contributed more than $600.00, and many have not yet received the inspiration or information to want to give individually or as an auxiliary. Many unique money making projects for A.M.E.F. have been undertaken in other states. Ten states contributed over $1.00 per member—some counties as much as $12.00 per member. Members of any Auxiliary, any size, anywhere should be willing workers for A.M.E.F. if an enthusiastic leader presents the need. Mrs. Carl Ferris, 629 W. 70th Terrace, Kansas City, Mo., will be glad to send material on A.M.E.F. or receive your contributions.

Have you read the page ad, "The Challenge of the A.M.E.F. to Keep Our Medical Schools Solvent and Free. Contribute to A.M.E.F.," in August, Missouri Medicine?

Mrs. Frank Gastineau, National Chairman, says: "Our Auxiliary has assumed part of the doctors' burden to help finance medical education. We will not only help our husbands, but we will understand and know each other better as we work together in our effort to make the United States a healthier and a better place in which to live."

Pettis County Pot Pourri

C. Gordon Stauffacher, M.D.

I had operated on a new bride for appendicitis. When her husband came in to see me about the bill, I mentioned that the operation should have been done at least a year earlier.

The groom smiled shyly, "In that case, Doc," he said, "Make the bill out to my father-in-law."

Jim says that a woman wears a sweater to accentuate the positive and a girdle to eliminate the negative.

While paying the fee for a prostatic massage, a patient gravely offered to pay me double if I would let him give me one.

The husband of one of my O.B. patients excitedly called me in the wee small hours and reported his wife was having "control pains."

"What kind of pains?" I asked.

"Oh, you know Doc," he replied, "Birth control pains."

Someone said that the definition of a hiccough was a message from departed spirits.

My six year old concluded her nightly prayers, "And please, God," she said, "put vitamins in pie and cake instead of in cod liver oil and spinach."

I told an alcoholic patient of mine, "If you would stop drinking it would prolong your days."

"You're sure right, Doc," he replied, "I stopped once for twelve hours and it was the longest day of my life."

From the looks of the bills I received the first of the month, we must have had a swell Christmas at our house.

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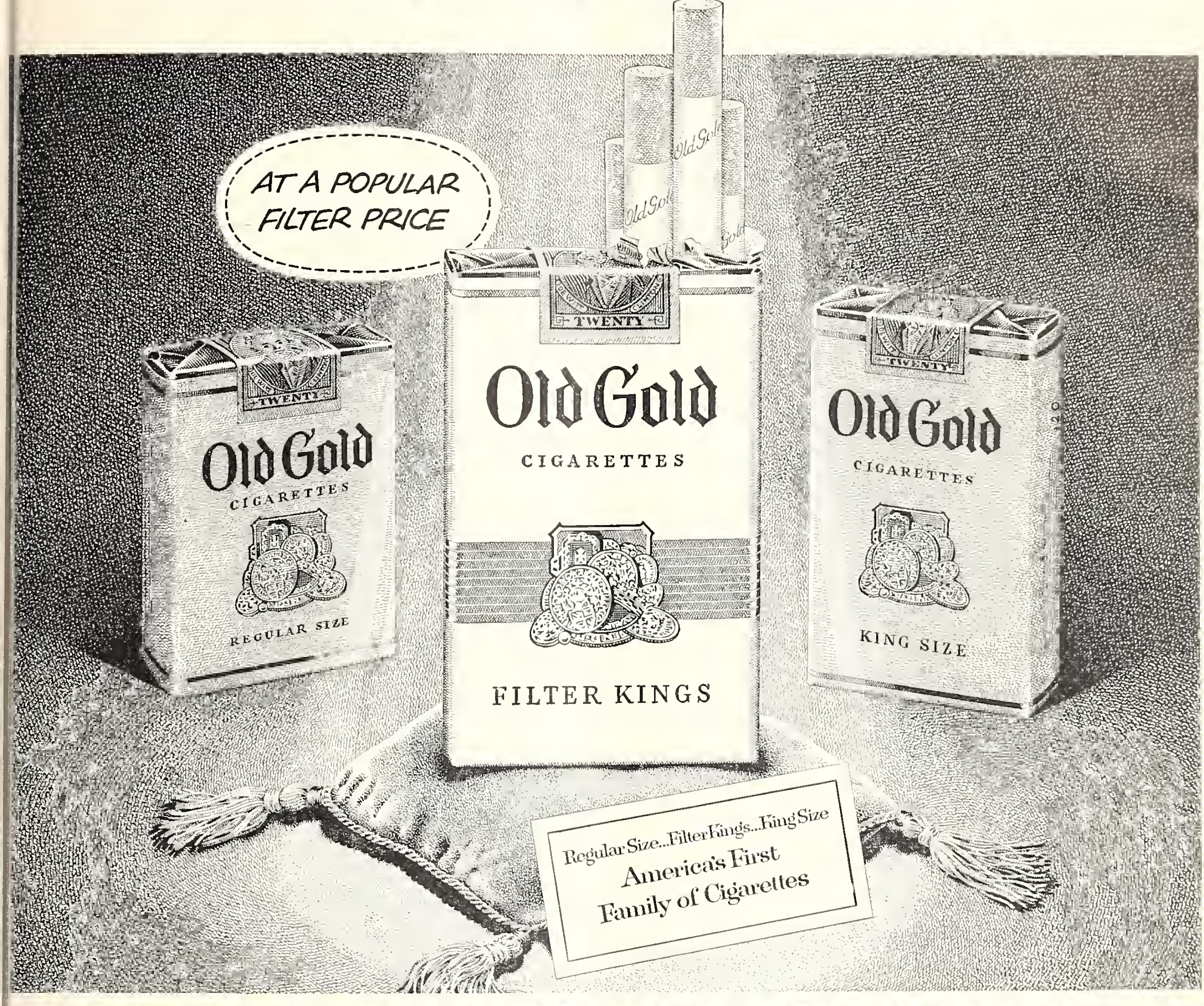
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Progress Notes of Prepayment Plans

(St. Louis Blue Cross)

It happened twenty-five years ago. There were no celebrations—no glowing announcements. And, no one set it down as being historically significant—but it was! Nearly forty-seven million people who belong to eighty-four Blue Cross plans in the United States, Canada and Puerto Rico are concrete evidence of the importance of the Blue Cross idea.

But, the ultimate effects of prepayment on the nation's hospital economy were not foreseen twenty-five years ago, when a university administrator started a group of Dallas public school teachers on a local hospital prepayment plan. The Baylor Plan was simply a three party agreement to pay the cost of hospital care. Subscribers paid a small monthly fee into a common fund, the Prepayment Plan, which was used for the payment of hospital bills. The hospital promised to provide a certain number of days of special "services" for a specified payment from the common fund. The entire transaction was nonprofit in keeping with hospital tradition. This was the beginning of the Blue Cross idea.

The American Hospital Association watched the progress of plans similar to the Baylor Plan and finally placed its national support behind the growing number of prepayment plans, coordinated under the Blue Cross idea. The American College of Surgeons and the Catholic Hospital Association formally approved the idea. The American Medical Association recommended hospital insurance as a community project.

The St. Louis Blue Cross Plan was organized early in 1936 by a group of public spirited citizens in conjunction with the medical societies and hospitals to provide a prepayment hospitalization plan for residents of St. Louis and surrounding areas. The advances in modern medicine and surgery, and the "once-upon-a-time" miracle recoveries which have evolved with the discovery of modern drugs and technics, have made Blue Cross plans an integral part of everyday living. Now more people than ever are hospitalized but, with the increased knowledge and technics of today's doctors, their stay is shorter and their chance for recovery is almost assured. In the St. Louis Plan area alone, 834,110 persons count on their Blue Cross membership when they need hospital care. Despite the climbing costs of hospitalization more people than ever before in history entered hospitals in 1954.

The Blue Cross story is that of no one man. Its growth has been spontaneous and unprecedented in present day history. The Blue Cross idea was engineered by men of vision and social responsibility whose accomplishments in the last twenty-five years have made hospital care more available to those who need it.

Capsule Clinics

I. A. Wien, M.D.

- In a series of more than 23,000 thyroid operations the incidence of carcinoma was 2.5 per cent. Warren, S., et al: Cancer **6** (November) 1953.

- Obstruction in the urinary tract is the most important cause of infections which persist or recur. Mulholland, S. W., et al: J. A. M. Women's A. **8** (December) 1953.

- Aberrant parathyroid tissue may be present in the thyroid gland, near the larynx, in the mediastinum, at the carotid sheaths, behind the esophagus, near the pericardium, or within the thymic rests. Steadman, H. E., and Jernigan, H. W.: Internat. C. Surg. **21** (January) 1954.

- The most frequent cause of death following one myocardial infarction is another myocardial infarction. Cole, D. R., et al: Circulation, J. A. Heart A. **9** (March) 1954.

- The ballistocardiograph records the vigor of the cardiac ejection and the speed of diastolic filling. It provides a practical means of studying physiological response of the heart in its adjustment to the stress of exercise. Mandelbaum, H., and Mandelbaum, R. A.: Circulation, J. A. Heart A. **9** (March) 1954.

- The releases of the American Cancer Society state that one third of the cancers which now result in death (75,000 per annum) could be cured by present methods of early diagnosis with no improvement of methods of treatment. Day, E.: Med. Clin. North America, 1954.

- In the conduct of a practice the physician, in addition to his scientific skill, should give something of himself to each patient whom he serves, a kindly personal human interest. Meadors, M. L.: J. M. A. Alabama **24** (August) 1954.

ELECTRON PHOTOMICROGRAPH COURTESY R.C.A. LABORATORIES

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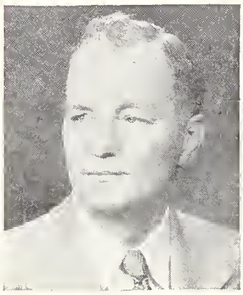
President's Page

Your president recently wrote to every member of the Missouri State Medical Association a letter concerning your Association's legislative proposal for a single standard for licensing physicians and surgeons. Because of the importance of that proposal to the medical profession and the people of Missouri, I am reproducing main parts of that letter.



The medical profession of Missouri is now engaged in one of the most important undertakings in its history. We are leading a statewide movement for a law that will set a high new standard for the protection of Missourians by guaranteeing an acceptable measure of competence on the part of all persons who will be licensed in the future to care for the sick.

The provisions of the measure that is to be submitted to the Missouri General Assembly convening next January under the formal sponsorship of your association represent nearly two years of hard work. This work was undertaken at the direction of your House of Delegates at the 1953 annual session at Kansas City. The provisions of the proposed law were presented to your House of Delegates at the annual session of 1954. They were approved by your House in the precise form in which they have now been set down in a formal legislative proposal.

The elements of the legislation to be sponsored by MSMA were defined and put in final form after the most complete and democratic discussion and after the most correct and scrupulous democratic procedure. They represent the best thought of the Association as to the best solution of a problem that gravely concerns not only our profession but all the people of our state—not only for the present, but for long years to come. The House of Delegates concluded this problem needed to be solved. The House has approved the solution now proposed.

Every part of the proposal is the product of effort by officers, committees, council and staff of your association. There has been no trading, no bargaining with any other group. This is the solution defined and recommended by the medical profession of the state.

I believe that every single medical man in Missouri will recognize that it is essential for all of us loyally to stand together in support of the plan that we as a group have drafted and proposed.

Now is the time to close ranks and stand together for our common purpose. If we succeed in this great undertaking, we shall have earned the respect of all the doctors to come in Missouri—and, more important, the respect and the gratitude of all the people to be cared for by those doctors of the future.

An analysis of the proposed act and the proposed bill appear on page 73 of this issue of Missouri Medicine.

H E Petersen M.D.

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 52 January, 1955 Number 1

Melmac(R) (Resin) Epidermal Sensitization

CLEMENT J. SULLIVAN, M.D.; ROBERT M. O'BRIEN, M.D., and VICTOR K. HAGER, M.D., *St. Louis*

Within the last two years several manufacturers have introduced products which, added to plaster of paris bandages, permit the application of casts that are water-resistant, strong and only about one half as heavy as ordinary plaster casts. The resultant advantages are obvious, and it is probable that the use of these additives will become quite popular.

Melmac® is one of these materials. Its active ingredient is a resinous compound. Casts made with Melmac® are well tolerated by most individuals; however, occasional instances of sensitization have been reported.[1]

An unusual case of sensitization to this chemical substance is described, and an explanation of the probable mechanism involved given.

REPORT OF CASE

M. J., a single, white female school teacher, aged 40, first noticed an enlargement of the right forearm just above the wrist in May 1935. The lesion was diagnosed as a giant cell tumor of the radius. Treatment, received elsewhere, consisted of a course of roentgen therapy, followed by surgical excision of the tumor in February 1936. The distal three inches of the radius were removed and an attempt was made to fuse the cut proximal end of the radius to the carpal bones by means of rib grafts. Nonunion resulted from this and a subsequent bone graft operation was performed in October 1938.

Because of continuing wrist pain and a severe palmar flexion and radial deviation deformity of the wrist, the patient consulted on of us for the first time in May 1952.

On May 15, 1952, a tibial bone graft operation was performed to repair the pseudarthrosis. An ordinary plaster of paris cast was applied. Wound healing was uneventful. At the time of a change of casts, on September 26, 1952, Melmac® was added to the plaster. About October 10, 1952, the patient became aware of local itching beneath the cast. This persisted, progressing by October 17 to local swelling and pain. All these symptoms continued and progressed and, on October 30, 1952, the cast was removed. Erythema, edema and multiple papulo-vesicles of the skin were present beneath the cast. On November 6, 1952, there was involvement of trunk skin, with redness and itching.

On November 13, 1952, scattered over the trunk and extremities there were areas composed of erythema, dryness, clusters of papules and lichenification, similar in appearance to the skin which had been in contact with the cast.

Antihistaminics were administered. By November 18, 1952, there was complete clearing of the skin. On that date patch tests were done with the various constituents of the Melmac® package, which include the resin powder, a crystalline catalyst and a glazed wrapper, which wrapper is dissolved with the other constituents at the time of cast incorporation.

On November 19, 1952, twenty hours after these applications, there was local itching and, six hours later the patient removed the patches in accordance with instructions. Generalized itching developed.

On November 21, 1952, there was a papular dermatitis localized at the site of application of the resin powder and a less extensive dermatitis at the site of the glazed wrapper application. Also, there was patchy involvement of distant areas with dermatitis similar in all respects to that originally observed. With treatment these areas of dermatitis disappeared within a few days.

The manufacturers of Melmac® supplied the information that Melmac® is a melamine formaldehyde resin of a type that contains no free formaldehyde, and that the glazed wrapper is a material similar in properties to a vegetable gum. No chemical formulae were supplied by the manufacturer.

The basic nucleus of melamine is shown in figure 1.

Tri-ethylene melamine, a substance which has biologic properties similar to those of nitrogen mustard, consists of three ethyl groups added to the melamine nucleus. Presumably Melmac® differs from tri-ethylene melamine by replacement of one or more of the ethyl groups with the aldehyde group, $H-C\genfrac{}{}{0pt}{}{\diagup H}{\diagdown\!\!\diagdown O}$, and perhaps by other radicle replacements.

Tri-ethylene melamine is believed to exert its physiologic effect by combining with intracellular enzymes, thus interfering with continued growth of the cell. It is well known that cells of the lymphoid series are extremely susceptible to this action of tri-ethylene melamine.

Our patient had developed generalized allergy of the tuberculin or epidermal type, as exemplified by the positive patch test reaction to Melmac.® In this type of allergy the antibody is contained within the lymphocyte, since it usually is possible to transfer passively this type of sensitivity by lymphocyte transfer. Therefore, our patient appears to have developed lymphocyte antibody.

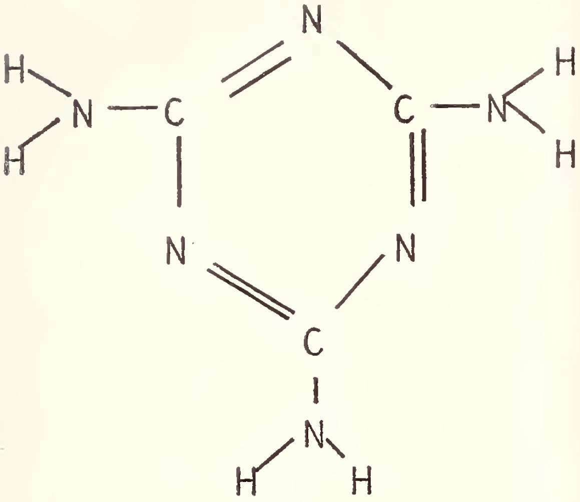

Fig. 1

We had believed her development of hypersensitivity was due to a chemical similarity between Melmac® and tri-ethylene melamine, since it is known there is an affinity of tri-ethylene melamine for white blood cells. Insufficient knowledge of the structure of Melmac® prevented further investigation of this possibility. Moreover, later events suggested that this was a case of resin allergy, with apparent cross sensitization, and that no unusual mechanism need be considered to understand its immunogenesis.

On December 18, 1953, after more than one year of good health, the patient redeveloped a papular dermatitis of the right forearm, at the site of the original area of involvement. There were also, scattered over the trunk, areas similar to the original trunk involvement.

On December 17, 1953, the patient had handled branches of an evergreen tree, either cedar or pine. The resin from these branches appears to have been the challenging agent, sufficiently similar to the resin incorporated in Melmac® to result in a clinical reaction. There is thought to have been no actual active direct contact of the involved skin, but only contact with the palms, which were unaffected; however, unsuspected direct contact cannot be excluded.

Although there was improvement, there was not, subsequent to this episode, complete clearing of the skin for several months. The patient continued to have generalized pruritus and intermittent exacerbations which were characterized by reappearance of the typical lesions, in patches, widely distributed. The right forearm was always involved during each exacerbation; other areas of involvement were widely scattered.

It is thought that the patient was inadvertently contacting substances related to the original resin in the course of her duties of school teacher. After the close of school her skin became completely normal and remained free of involvement.

CONCLUSIONS

1. Melmac® is capable of producing sensitization of the epidermal type after prolonged skin contact.
2. The resin appears to be the sensitizing fraction.
3. Tree resin is capable of challenging successfully a Melmac® epidermally sensitized individual.
4. Casual contact with chemically related vegetable gums and resins appears capable of successful challenge.

4161 Lindell Blvd.

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Making New Year's Resolutions? Be sure to include the one to make reservations early for the 1955 Missouri State Medical Association Annual Session.

Kansas City, March 27-30, 1955

Chondromalacia of the Patella

B. A. LIEBERMAN, JR., M.D., SIDNEY RUBIN, M.D., AND DAVID S. DANN, M.D., *Kansas City*

THE PURPOSE IN presenting this single case is to better acquaint the clinician with an entity which has been most confusing in its terminology, etiology, incidence and diagnostic features. Although this disease has been recognized for approximately forty years, there is still lack of complete agreement concerning the part played by the roentgen examination in its diagnosis. It is with the solution to these problems in mind that we have reviewed the literature hoping to bring some light to this generally overlooked and confused condition.

The typical history is exemplified in the case presented. G. G. was admitted to the Menorah Medical Center on March 11, 1954, complaining of "grating" and pain in the knees for several years, especially on descending stairs. The past history revealed severe trauma in both knees in childhood. The physical examination revealed a sensation of "grating" over each patella as that knee was flexed or extended. Roentgenograms of the knees revealed the typical "cystic" appearance of patellas (see fig. 1) pathognomonic of chondromalacia patellae.

TERMINOLOGY

The term "chondromalacia patellae" applies to the degeneration of the articular surface of the patella, evidenced by softening, fibrillation with eventual fissuring of the cartilage and occasionally secondary bone changes.

The condition was first described by Büdinger[1] in 1906 as "Traumatische Knorpedrisse," (traumatic fissuring of the cartilage). König,[2] however, has been given credit for the first use of the term "chondromalacia patellae." The disease has been further described as fissuring cartilage degeneration, chondritis of the patella, traumatic degeneration of the patella and traumatic osteochondritis.

ETIOLOGY

Trauma, as the primary factor for the degeneration of the patellar cartilage, was suggested by Büdinger[1] and this theory was accepted by many authors such as Fründ,[3] and Aleman.[4] However, a history of trauma is not elicited in all cases. Aleman[4] considered these cases to be due to repeated minor traumata which could not be recalled by the patient. Subsequent wear and tear would then produce the damage. Because of the different clinical histories obtained, Aleman[4] termed the nonsymtomatic cases as "Latente Chondromalazie"; those with symptoms, the "manifest chondromalazie."

The similarity between chondromalacia and degenerative arthritis and their frequent association, has been recognized by König[2] (1928). This conclusion was drawn from the roentgen observations, when present, of spur formation about the margins of the patella.

These authors were so convinced of the relationship that they resected the patella in many cases hoping to allay the progress of degenerative arthritis. However, this procedure did not accomplish the desired retardation of arthritis.

Today the feeling is that degeneration of the patellar cartilage can exist without trauma. However, everyones' knees are traumatized to greater or lesser degrees by crawling as an infant and, in many instances, by various blows insufficient to fracture the patella. In fact, it has been demonstrated by many investigators that this condition exists frequently in the knee and its incidence increases with age. The frequency of this entity has been borne out by cadaver studies as well as on specimen observed during arthotomies by Owre,[5] Aleman,[4] Hilzensauer[6] and Chaklin.[7] The youngest patient was a 10 year old girl reported by Hinricsson.[8]

PATHOLOGY

The degenerative changes found in the cartilage and synovia have been described by many investigators. Briefly, softening is seen at the points of stress in this order. In the early stage, softening may be seen only about the medial facet of the patella, the cartilage loses its bluish translucent

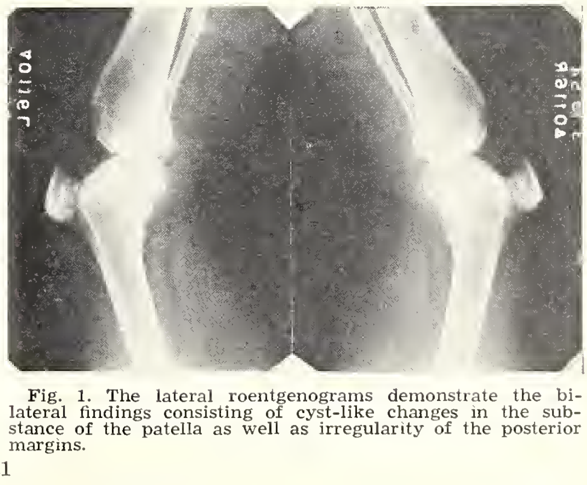

Fig. 1. The lateral roentgenograms demonstrate the bilateral findings consisting of cyst-like changes in the substance of the patella as well as irregularity of the posterior margins.

B.A.L., Medical Department of Menorah Medical Center and Assistant in Medicine at University of Kansas Medical Center; S.R. and D.S.D., Department of Radiology, Menorah Medical Center.

appearance and becomes opaque and yellow in color. Subsequently, as degeneration proceeds, cracks and fissures develop. This may progress until the underlying bone is exposed. The bone becomes eburnated or small osteophytes may develop along the patellar margins. These may occur early in the disease and, when present, assist in the roentgen diagnosis. Subchondral cyst-like changes may occur as reported in our case. The synovial membrane is sometimes secondarily involved, and, shows evidence of noninfectious inflammation.

Distinctive of the disease is its bilateral character in approximately 50 per cent of the cases. Microscopic examination shows that the early lesions feature the fibrillation of the superficial layer of the cartilage; the deeper adjacent layer is swollen, as revealed by its abnormal staining, and contains relatively few cells. The individual cells degenerate, increase in size and are heaped together in small groups forming lacunae. The subchondral bone shows no conspicuous changes until the overlying articular cartilage has become altered. When erosion extends for a considerable distance into the hyaline matrix, the marrow of the subchondral bone responds with various degrees of fibrous proliferation. Occasionally, an isolated mass of cartilage will be found in the marrow spaces. It is these areas that appear as cysts, radiologically.

CLINICAL SYMPTOMATOLOGY

The history is usually that of a chronic knee discomfort that varies in degrees of severity. There may be difficulty in extending or flexing the knee associated with pseudo-locking. The patient experiences severe pain lasting a few seconds which then disappears practically completely. The pain is aggravated by ascending or descending the stairs. There is occasionally joint effusion which may be an initial complaint or follow an episode of joint pain.

Crepitation of the patella has been emphasized as the most constant and characteristic sign of this disease. Aleman[4] stated that the location of the crepitation under the patella is pathognomonic. Karlson[9] believed that an experienced examiner can make a diagnosis of chondromalacia of the patella on the basis of the location, hardness, coarseness and quantity of the crepitation alone.

Crepitation usually can be elicited with the patient supine by completely extending the knee from 90 degrees. But sometimes it is necessary to examine the patient standing. Owre[5] has demonstrated that degeneration of the patella can exist without crepitation but this would be more apt to exist in the subclinical or latent state. Pain, on pressure over the patella, is often present. This is best demonstrated with the knee flexed approximately 45 degrees. Aspiration of the effusion, when present, will usually show a clear fluid.

Roentgenograms are only occasionally of any assistance in making the diagnosis. This is readily understood when the pathology of the disease is appreciated. Since changes in the cartilage are not visible radiologically, and bone changes will only occur as a secondary effect the x-ray findings, therefore, will be limited to a small percentage of the cases.

There may be only slight roughening in the central or medial facet or about the posterior aspect of the patella. Billings[10] has suggested that any marginal lipping in the posterior aspect of the patella is secondary to the malacia of the cartilage. Thus, a small osteophyte in the posterior surface of the patella may be quite significant with or without other arthritic manifestations.

If the condition is advanced, one may observe eburnation of the posterior surface of the patella and occasionally cyst-like areas of rarefaction may be present as in the case we are reporting. These findings are frequently bilateral.

TREATMENT

In the majority of the cases conservative measures suffice, but in the more severe, surgery has offered several corrective methods. Chondrectomy and patellectomy have been the procedures performed with advocates and opponents of each method. Bronitsky[11] claims 75 per cent favorable results with chondrectomy. Patellectomy is said by some authorities of large experience to be completely effective in uncomplicated cases, and is the current treatment of choice. Evaluation of the best surgical procedure is usually made at the time of surgery.

CONCLUSION

1. Chondromalacia is a relatively frequent condition occurring in both the young and the old.
2. The disease has been described under many different terms, all defining this single entity.
3. The signs and symptoms are diagnostic for this condition and, in the main, the radiographs are of little value. When x-ray findings prevail, they are secondary to cartilaginous degeneration and are observed about the posterior margins as well as in the patella bone substance.
4. In patients troubled with pain and in whom conservative treatment fails, surgery affords definite relief.

410 Professional Bldg.

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Gastroscopy With Biopsy

Differential Diagnosis of Carcinoma of the Stomach

EDWARD B. BENEDICT, M.D., *Boston*

BEFORE 1945 gastroscopy suffered by comparison with all other endoscopic procedures in the inability to obtain a biopsy. In that year the American Cystoscope Makers, Incorporated, and I collaborated in making a flexible instrument known as the Benedict Operating Gastroscope,[1] by means of which it is now possible to obtain biopsies and aspirate secretions. The importance of biopsy in laryngoscopy, bronchoscopy, esophagoscopy, thoracoscopy, peritoneoscopy and proctoscopy is certainly well established. In the differential diagnosis of gastritis, lymphoma and carcinoma of the stomach, gastroscopic biopsy is equally important.[2, 3, 4, 5]

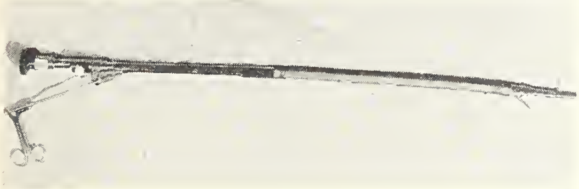

Fig. 1. Benedict Flexible Operating Gastroscope showing biopsy forceps in place. (Courtesy, Gastroenterol. 2:281, 1948.)

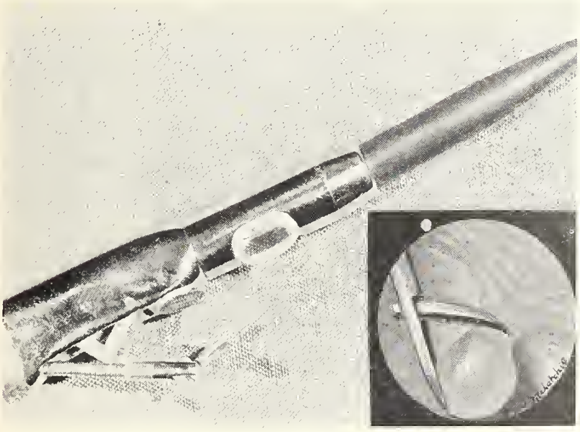

Fig. 2. Close up view of distal end of gastroscope showing the forceps in the open position elevated by the "lid" and in position to be seen through the objective lens, and (insert) gastroscopic view showing biopsy forceps grasping benign adenomatous polyp, proved by biopsy and confirmed later by operation.

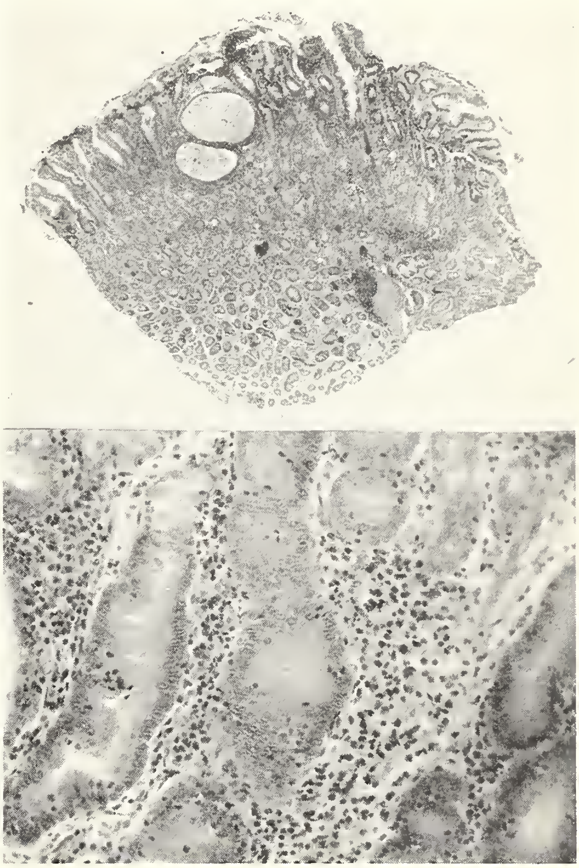

Fig. 3. Low power view of severe acute and chronic gastritis showing size of specimen obtained, using Benedict Flexible Operating Gastroscope with biopsy forceps, and high power view showing acute and chronic gastritis with plasma cell and leukocytic infiltration in gastroscopic biopsy specimen.

The Benedict flexible operating gastroscope is shown in figures 1 and 2. There is an extra channel extending the whole length of the gastroscope through which it is possible to pass either a polyethylene tube for aspirating secretions or a flexible forceps for biopsy. The close-up view of the distal

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From the Department of Surgery, Harvard Medical School, and the Surgical Services, Massachusetts General Hospital. Part of a Symposium on Cancer of the Stomach delivered at the Ellis Fischel State Cancer Hospital, Columbia, December 1, 1951.

Assistant Clinical Professor of Surgery, Harvard Medical School; Endoscopist, Massachusetts General Hospital.

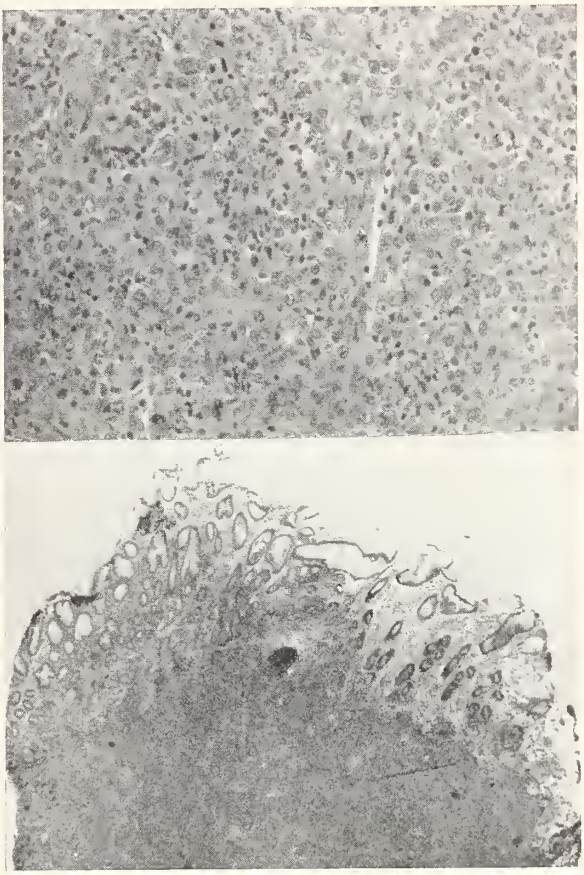

Fig. 4. Low power view of malignant lymphoma showing size of gastroscopic biopsy specimen, and high power view showing malignant lymphoma in gastroscopic biopsy specimen.

end of the gastroscope (fig. 2) shows the lid lifter in the elevated position for directing the forceps, the objective lens through which the forceps may be observed, the light bulb and the flexible rubber finger tip. With these forceps 400 biopsies have been obtained with no complications. The insert in figure 2 illustrates the tip of the biopsy forceps as seen through the objective lens in position to take a biopsy specimen from a gastric polyp. In this case the pathology report was benign adenomatous polyp, later confirmed by surgery.

A few case reports will be sufficient to indicate the importance of gastroscopic biopsy.

REPORT OF CASES

Case 1. A 42 year old man entered the hospital complaining of epigastric distress of seventeen years' duration. X-ray examination disclosed a duodenal ulcer and raised the question as to whether the thick folds seen in the stomach were due to gastritis or to lymphoma. By gastroscopy there was evidence of acute superficial and chronic hypertrophic gastritis but lymphoma was also a possibility to be excluded only by gastroscopic biopsy. Biopsy in this case was reported as severe acute and chronic gastritis (fig. 3). Although negative biopsies must be evaluated carefully with regard to excluding the possibility of a malignant neoplasm, it is felt that lymphoma is usually a diffuse process and that biopsy is therefore reliable in excluding it. Figure 3A illustrates the adequacy of the biopsy obtained in this case.

Case 2. A 31 year old woman entered the hospital with an eight months' history of anorexia, vomiting and fifty pound weight loss. She ran a spiking fever up to 103 F. and had no acid after histamine. Although lymphoma was considered as a clinical diagnosis, x-ray examination was reported as questionable gastritis and lymphoma was mentioned as a remote possibility. Gastroscopy revealed a nodular rigid appearance consistent with lymphoma. Gastroscopic biopsy showed a highly malignant tumor consistent with either undifferentiated carcinoma or lymphoma (fig. 4), later proved to be lymphoma by surgical resection.

Case 3. A 70 year old man entered the hospital because of gastrointestinal bleeding seventeen years after a pylorectomy and posterior gastroenterostomy, which had been done for gastric ulcer. X-ray study showed wide gastric and jejunal folds. Gastroscopy revealed a deep rigid irregular ulcer two centimeters in diameter. Gastroscopic biopsy was reported adenocarcinoma (fig. 5).

DISCUSSION

Gastritis.—By gastroscopic biopsy we are obtaining material for correlating clinical, radiologic, gastroscopic and pathologic findings in gastritis. Are symptoms due to gastritis? Do thick folds by x-ray mean gastritis? Does a verrucous appearance

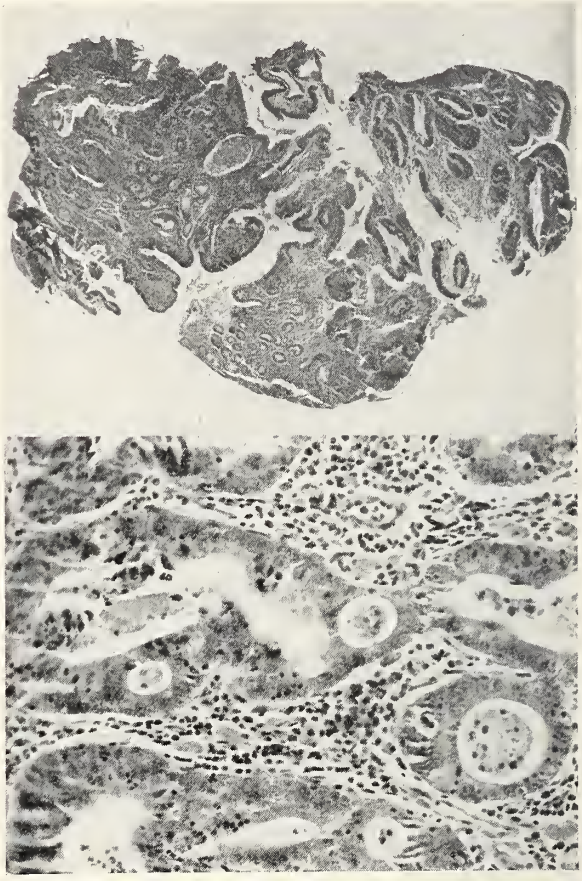

Fig. 5. Adenocarcinoma, low power view of gastroscopic biopsy specimen and high power view from gastroscopic biopsy specimen.

mean gastritis? Lymphoma, carcinoma and gastritis may be indistinguishable by any method except gastroscopic biopsy.

Lymphoma.—A positive biopsy proving lymphoma clinches a diagnosis that cannot be made otherwise, except by laparotomy. A negative biopsy, or a biopsy showing only severe gastritis, helps to exclude lymphoma because lymphoma is usually a diffuse process.

Carcinoma.—A positive gastroscopic diagnosis for carcinoma settles the diagnosis. A negative biopsy, however, does not rule it out because it may not have been taken deeply enough or from the right area.

CONCLUSIONS

Gastroscopic biopsy is of great value in the differential diagnosis of carcinoma, lymphoma and gastritis.

Four hundred gastroscopic biopsies have been obtained, using the Benedict flexible operating gastroscope.

There have been no complications.

The value of an exact pathologic diagnosis is obvious.

No gastroscopic examination is complete without biopsy.

A new field has been developed for the pathologic study of gastric tissue.

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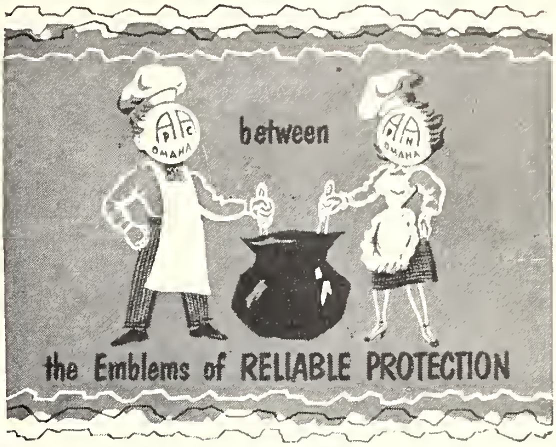
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Miliary and Nodular Infiltrates

SYDNEY JACOBS, M.D., *New Orleans, La.*

SMALL PULMONARY infiltrates, strongly resembling those formerly believed pathognomic for miliary tuberculosis, are frequently detected by chest x-ray examination and occasional exercise in differential diagnosis. Popularly termed miliary or nodular, these infiltrates are not strictly localized but represent generalized involvement, although some areas in one or both lungs may be more prominent than others. This is probably due to technical factors as at autopsy most lesions of the types herein discussed are found to be evenly dispersed. It is now known that many conditions can produce lesions capable of casting such shadows but tuberculosis still has to be remembered as the classic basis.

It is easy to understand why clinicians who first had the advantages of the x-ray for studying pulmonary diseases always interpreted such infiltrates as tuberculosis. The concept of miliary tuberculosis had been accepted at least since the time of Bayle (1774-1816); the tiny (2 mm. diameter) "millet-seed" size lesions demonstrated by the pathologist at autopsy were recognized as spreads from a tuberculous caseous focus which had eroded a blood vessel. With more frequent chest x-ray examination, especially with photoroentgenography, radiologists and clinicians demonstrated miliary infiltrates in persons who did not succumb rapidly or have any other of the usual infiltrates in evidences of tuberculosis. By 1938 Donald King[1] had collected examples of nontuberculous miliary infiltrates produced by various types of irritants (bacterial, viral, mycotic, chemical, neoplastic) and had emphasized the constant need to distinguish each from tuberculosis.

Obviously, the term miliary infiltrate can no longer have any etiologic connotation; the shadows seen on the roentgenogram therefore represent simply the response of the lung to a variety of irritants. Studies of the histologic basis for these shadows indicate that the actual lesion which the pathologist can dissect is much larger than one would have inferred from the roentgenogram. Apparently irrespective of the cause of the infiltrates, the size and density of the shadow depends less on the volume of the actual lesion than on its compactness; an organized area of 1 mm. diameter will cast a more definite shadow than a less compact lesion 5 mm. in diameter. Particularly in tuberculosis, it has been shown that the radiability is not due to the content of calcium or any other identified chemical substance; "soft" or epitheloid tubercles are seen with great difficulty whereas "hard" or fibroplastic tubercles are better seen.

Ordinarily, only a film of excellent technical[2] quality permits identification of miliary infiltrates. Air contrast is all-important. These lesions can be seen in the adult lung much better than in the infantile. Overaeration or underaeration may impair visualization. Carter has emphasized that minute foci require summation to be radiographically detectable; paucity of lesions renders them invisible; profusion causes a diffuse haze. The nodules actually seen are those in a thin layer of the lung near the film. The breast shadows of the female may bring out miliary detail by lessening general film blackness or may obscure it by carrying density too low for visualization.[3]

The clinician a long time ago realized that only the slow, tedious and painstaking process of history taking and physical examination will suffice to bring into focus the more important possibilities; in association with appropriate laboratory studies, the chest x-ray examination will then aid to narrow the search to the most probable causes of the patient's pulmonary infiltrates. In this process, classification of the various reported causes of miliary and nodular infiltrates helps to bring a semblance of order from chaos. A helpful classification is this condensation of that offered originally by Donald King. Illustrative examples in each category were drawn from the Charity Hospital of Louisiana, representing largely patients passing through the Chest X-ray Unit. In each case, the definitive diagnosis was made only after complete study, usually with histologic, bacteriologic or serologic confirmation. The list of clinical entities is, of course, incomplete; any effort at cataloging all possible causes for miliary and nodular infiltrates would be well beyond the scope of this presentation.

Classification of miliary and nodular infiltrates follows: I. Infections; II. Inhalations; III. Neoplasms; IV. Blood Diseases; V. Generalized Diseases; VI. Granulomatoses; VII. Circulatory disturbances.

I. INFECTIONS

Infectious diseases of the lungs possibly account for more disseminated pulmonary miliary infiltrates than any other group. Until recently, tuberculosis was the most frequently diagnosed disease when such lesions were portrayed on the x-ray film of the chest. Although miliary tuberculosis is

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perhaps not seen so frequently as formerly, it is diagnosed with relative frequency even today. Within two to three weeks after tubercle bacilli have been disseminated throughout the body by perforation of a caseous focus into a blood vessel, tiny lesions may be observed on the roentgenogram. Symptoms may occur well before these minute foci are dense enough or are sufficiently numerous to permit visualization through summation; hence the chest film may appear to be entirely normal in someone who within a period of weeks may have the typical roentgenographic picture of disseminated miliary tuberculosis or who may even succumb to the disease. Prior to the use of antibiotics, miliary tuberculosis was invariably fatal and only occasionally permitted coalescence and calcification of foci and establishment of "chronic miliary tuberculosis." In other patients, particularly following pleural effusion, there occurs a more protracted generalized pulmonary spread with a long interval between generalization and coalescence. Interestingly, those successfully treated by antibiotics for hematogenous tuberculosis have had apparent resolution of most lesions without calcification.

Perhaps even more common than pulmonary tuberculosis as an infectious cause of dissemination of pulmonary infiltrates is histoplasmosis. This fungus infection has been thoroughly studied; predominating in the area of the Mississippi River Valley, it causes miliary dissemination frequently without symptoms or evident impairment of health. The lesions may at times closely resemble any known aspect of tuberculosis, may be bilaterally symmetrically distributed and of fairly uniform size, shape and calcification. The presence of fungi in the fresh sputum preparations and ability of the body to react to the specific antigen, histoplasmin, facilitate the diagnosis.

II. INHALATIONS

It is possible for particulate matter to gain entry into the tracheobronchial tree and to overcome the self cleansing action of the tracheobronchial tree. In aspiration of such foreign matter, especially if the body defenses are obtunded by shock, anesthesia or narcosis, it is possible for areas of pneumonitis to develop with great rapidity. On the other hand, if such agents are inhaled in lesser concentration and at a slower speed over a longer period of time, a more chronic form of pulmonary disability may ensue. At times, inhalation of foreign particles may cause deposition of metallic particles in the branches of the tracheobronchial tree without commensurate lessening of pulmonary function. Such asymptomatic miliary deposits may simulate miliary infiltrates and cause considerable diagnostic confusion.

Aspiration pneumonitis following asphyxia is a good representative of the first category. Focal areas of pulmonary edema with or without superimposed infection may produce evanescent, small rounded shadows.

The granulomata produced by inhalation of beryllium illustrates the latter category. The nodule produced here seldom exceeds 1 mm. in diameter and casts a shadow on the roentgenogram at times difficult to see because of the fine sand-paper distribution of the particulate matter; there is a reticular form with a fine lace network when the lesions are "reinforced" by the bronchovascular structures.[4]

III. NEOPLASMS

Although primary bronchiogenic carcinoma may occasionally first be noted as a diffuse bilateral lesion producing shadows simulating the previously described miliary infiltrates, this similarity is more apt to occur with metastatic carcinoma. A diffuse alveolar type of carcinoma or pulmonary adenomatosis may cause such confusing shadows to appear on the roentgenogram. Miliary carcinomatosis may occur whenever primary carcinoma outside the lungs permits blood stream invasion and generalization. The diagnosis may at times be inferred from inspection of the x-ray of the chest, but essentially it rests on demonstrating a primary carcinoma elsewhere and failing to establish any other reasonable etiology for the pulmonary shadows or else actually by histologic demonstration, showing the lesions.

IV. BLOOD DISEASES

Lymphatic leukemia, Hodgkins disease and others of the lymphoma group may cause pulmonary generalization in the course of the disease. Ordinarily there is enlargement of the mediastinal lymph nodes but this is not an invariable occurrence. As a rule, the diagnosis is established only by tissue section study or by hematologic methods.

V. GENERALIZED DISEASES

Of the systemic diseases, sarcoidosis is most apt to produce shadows suggesting miliary tuberculosis. The lesions are unstable and are apt to recur. Usually mediastinal or tracheobronchial lymphademopathy will be noted at some stage of the disease, and there is a marked discrepancy between extent of the lesions and degree of symptomatology. The familiar extra-pulmonary findings, the tuberculin anergy and the typical histologic appearance of excised lymph nodes help to establish the diagnosis.

Lupus erythematosus and scleroderma are other diseases which at times cause the appearance of miliary infiltrates.

VI. GRANULOMATOSES

In this group of pulmonary diseases, due chiefly to structural abnormalities with superimposed infection, there is apt to be gradual encroachment on the lumina of air passages, resulting bronchial and bronchiolar obstruction and varying degrees of airlessness of the lungs especially in the more basal portions. This type of miliary infiltrate is best illustrated by bronchiolectasis and cystic disease of the lungs.

VII. CIRCULATORY DISTURBANCES

In a number of cardiovascular disturbances, there is apt to be produced a roentgen appearance closely simulating that of miliary tuberculosis. In most instances, there are the usual other evidences of cardiac disease but occasionally as in the five cases reported by Hurst, Bassin and Levin[5] the patients may have rheumatic heart disease without symptomatic or auscultatory evidence. Whenever back pressure is built up in the lesser circuit causing pulmonary hypertension resulting in increasing capillary pressure and increased dilatation of the capillary bed ten to thirty times the normal size, there may follow percapillary edema of the alveolar wall and deposition of collagen. The edema may resorb but if the process becomes chronic, fibrosis and obliteration of the capillary bed occur and concommitant pulmonary emphysema lowers pulmonar ventilation.

Pulmonary edema may, in the course of hypertensive cardiovascular disease, cause small poorly defined areas in both pulmonary fields strongly suggesting miliary infiltrates.

SUMMARY

Miliary and nodular infiltrates are frequently detected roentgenographically. These densities largely reflect the geographic location and type of clientele attended by a given roentgenologic unit. Illustrations of various causes for such infiltrates serve to show that classification is a helpful device for facilitating further clinical study, but that few —if any—lesions cast an unmistakable shadow on the roentgenogram. The clinician who has an opportunity to witness the evolution of the morbid state as expressed by the chest x-ray, is in a strategic position best to learn the etiology. So closely do such infiltrates of diverse etiology resemble each other that the diagnosis can be made only after a thorough clinical examination. The initial roentgenogram of the chest may suggest the diagnosis, but only after the routine examination has been complemented by special studies will the diagnosis be forthcoming.

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Case Report

Squamous Cell Carcinoma of the Rectum

FRANCIS J. BURNS, M.D., *St. Louis*

SQUAMOUS CELL carcinomas of the rectum are quite uncommon. In 1950, Le Blanc and Buie[1] noted that six cases of squamous cell carcinoma of the rectum had been reported in detail in the literature and they added five additional cases from the files of the Mayo Clinic. In 1954, Dixon, Dockerty and Powelson[2] reported another case of squamous cell carcinoma of the rectum, the sixth to be recorded at the Mayo Clinic, and the twelfth in the literature.

The following is a report of another case of squamous cell carcinoma of the rectum.

REPORT OF CASE

D. M., a 29 year old female, entered St. Mary's Hospital, St. Louis, June 7, 1950. For four months prior to admission she had had a dull, aching pain in the region of the rectum, and also had noticed bright red blood on the toilet tissue. One month prior to admission the condition became worse, with onset of tenesmus and increased frequency of bowel movement. There was a decrease in the caliber of the stool. She also had slight weight loss and anorexia.

General physical examination was essentially normal. On digital examination of the rectum there was moderate sphincter spasm with tenderness in the posterior anal canal. A large, firm, somewhat irregular mass bulged into the lower posterior rectum, causing a stricture, and preventing an adequate examination of the upper rectum. The lesion seemed to be extrarectal and its surface was ulcerated. The ulcer defect was firm, tender and irregular, and its edges were everted. Attempted biopsy was too painful.

On June 9, 1950, a biopsy was done under anesthesia and the pathologic report was squamous cell carcinoma of the rectum.

On June 17, 1950 a procto-sigmoidectomy was done. The patient made an uneventful recovery, and she was discharged from the hospital on July 6, 1950.

Pathologic examination is as follows: Gross examination; there is a mass 7 cms. in diameter posterior to the rectum and 1 cm. from the upper anus. It is hard, nodular, infiltrated and ulcerates the rectal mucosa. Sectioning reveals grey, firm, flat tissue which invades the mucosa. Several firm, greyish-white lymph nodes were removed, mostly from the proximal portion of the rectum. Microscopic examination: There are sheets of malignant squamous epithelial cells with pearl formation, pleomorphism and mitotic figures present. These tumor cells invade from the mucosa into the muscularis of the rectum (fig. 1). No metastases were seen in eleven lymph nodes which were removed for study.

The pathologic diagnosis was: Squamous cell carcinoma of the rectum.

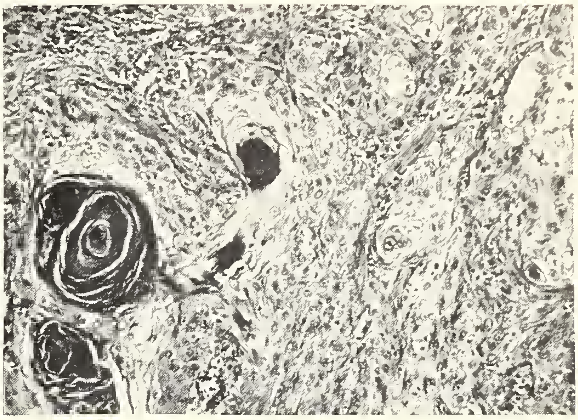

Fig. 1. (High power). Section of the tumor showing typical squamous cell carcinoma.

There was no metastasis to: seven rectal nodes, three sigmoidal nodes, one mesosigmoidal node.

The patient reentered the hospital on December 12, 1950 for revision of the colostomy stoma. There was a stenosis of the stoma resulting from scar tissue.

When last seen, January 16, 1954, she was in good health and there was no evidence of recurrence of the tumor.

SUMMARY

A case of squamous cell carcinoma of the rectum is reported, the thirteenth such case to be reported in the literature.

4660 Maryland Ave.

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Postgraduate Review

Problems of the Pleural Space

G. H. LAWRENCE, M.D., *St. Louis*

THE POTENTIAL space between the visceral and parietal pleura may become an actual space occupied by air or liquid. This space is developed at the expense of function of the underlying lung. Associated with this liability is the potentiality that pleural sepsis will occur in the contents of the space. The last ten years have witnessed many significant advances in the handling of these problems, but confusion still exists concerning definitive management. A review of these advances and the manner in which they have been applied to illustrative cases under my care, constitute this report. Serous effusion is omitted from this discussion but its diagnosis is significant in otherwise quiescent pulmonary tuberculosis.[1]

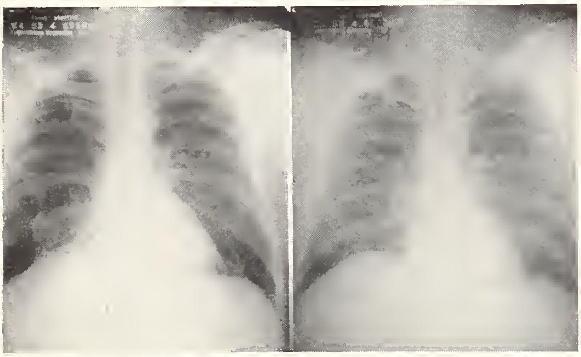

Fig. 1. a. Pneumothorax following right stellate ganglion block. b. Reexpansion after the aspiration of 1,000 cc. of air.

PNEUMOTHORAX

Air pathologically enters the pleural cavity via the lung or the chest wall. The latter route may be employed intentionally as a means of therapeusis. Many cases are induced unintentionally in the course of diagnostic or therapeutic procedures adjacent to the pleura. Figure 1 represents a simple example of such an inadvertent pneumothorax produced during stellate ganglion block in the right neck on a 34 year old man with traumatic causalgia of the arm. Following the procedure he experienced moderate dyspnea and some chest pain which was relieved with the aspiration of 1,000 cc. of air from his right chest by needle aspiration. There has been no evidence of subsequent collapse.

Many surgeons have experienced concern over unintentional pneumothorax occurring during operations in areas contiguous to the pleura. This can be expeditiously handled at the time of operation by expansion of the lung with positive endotracheal pressure by the anesthetist, followed by air-tight closure of the pleura and associated soft tissues over a rubber catheter which may be either connected to water seal drainage or removed after adequate aspiration. Should there be significant residual air following removal of the catheter, it can be aspirated by syringe and needle.

Pneumothorax may develop as a result of penetrating and crushing wounds of the chest.[2] Tension pneumothorax can develop as air is sucked into the pleural cavity from either the lacerated bronchus,[3] lung or chest wall. Associated with pulmonary collapse is a shift of the mediastinum toward the opposite lung which is, therefore, diminished in volume. Such a fatal progression can be altered dramatically by the insertion of a large gauge needle to relieve the tension in the anterior chest. A flutter valve may be fashioned from the finger of a rubber glove to prevent air entering the needle during inspiration. Should the air enter through a chest wall defect, this should be stopped; adhesive strapping and petrolatum gauze often being effective until definitive debridement and closure is obtained.

Spontaneous pneumothorax, described by Laennec,[5] was usually considered to be of tuberculous etiology.[6] Kjaergaard[7] in 1932 brought attention to the large group of otherwise healthy patients in the younger age group who experience painful sudden spontaneous collapse of a lung. While tuberculosis may be the underlying disorder in nearly one third of nontraumatic cases,[8] differentiation from the idiopathic form is usually apparent by the associated findings of pyrexia, fluid and pulmonary infiltration.[9] It is interesting that many French physicians induced pneumothoraces in World War II to escape deportation, as the Nazis still considered such "idiopathic" collapse sufficient evidence to recommend sanatorium care for tuberculosis.[10] The incidence of tuberculosis following spontaneous pneumothorax is no greater than in the general population.[11] Etiologically these cases originate most commonly from apical bullae, congenital cysts and emphysematous blebs.[12, 13, 14] While the condition has been noted to occur once in every 1,000 college students,[15] these patients have comprised 2 per cent of admissions to the Thoracic Surgical Service of this hospital since July, 1951. A similar incidence has been noted by Hughes.[16] A small amount of fluid and a mild fever are not uncommon.[17] Kjaergaard described only six fatal cases, and several nonfatal cases of contralateral collapse after pneumonectomy have been described;[18] one in my experience, surviving following 40 per cent collapse of the remaining right lung.

While the acute episode is physiologically tolerable, if emotionally disturbing, the condition is prone to chronicity and recurrence if not treated.[12] Chronicity is an important feature; it is disabling and not a matter for complacency.[19] To avoid chronicity, early and complete expansion of the lung should be instituted. While many cases of minimal collapse will reexpand slowly, this ability depends in part on whether the air space is being continuously supplied by a significant leak. Should a large leak persist and collapse continue, the lung may be subsequently encapsulated and held in collapse by a fibrous peel formed around the visceral pleura. There are two methods available to actively reexpand the lung: (1) Needle aspiration of the air is preferably accompanied by measurement of pleural pressures with a pneumothorax apparatus, if this be available.[20, 21] Tension pneumothorax, which exists in nearly one fifth of the patients,[17] will thus be demonstrated and over ambitious aspiration of a nonexpansile lung may be avoided by use of this apparatus. A 43 year old farmer developed a negative pressure following the aspiration of 1,000 cc. of air, three weeks following spontaneous collapse; however, subsequent x-ray (fig. 2) revealed the right lung still collapsed, indicating encapsulation of the lung. Pleural pressures, measured twenty-four hours later, had returned to positive indicating a persistent bronchopleural fistula. He was later explored, the peel on his pleura was decorticated and a ruptured bleb in the apical segment of his right lung was removed by segmental resection. (2) Trochar thoracotomy in the anterior chest wall to institute catheter drainage to water seal suction provides a safe, reliable method of evacuating air continuously and slowly at a physiologically desirable negative pressure. The addition of continuous suction to this negative pressure[22] may be of value but is not without danger (fig. 3).

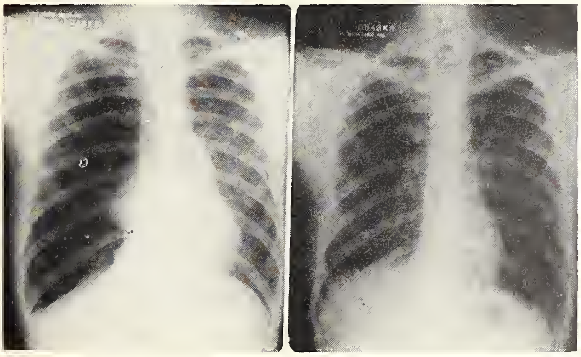

Fig. 2. a. Spontaneous nonexpansile pneumothorax requiring decortication and apical segmental resection. b. Postoperative film.

Recurrence has been reported in anywhere from 5 to 35 per cent of cases.[12, 21] To avoid recurrence, artificial pleuritis by means of injected silver nitrate,[12] autogenous blood,[23] iodized talc[24] or mechanical irritation[25] has been employed. Blades reports no recurrence in thirty cases and in those four studied, there was no significant reduction in pulmonary function[24] following talc poudrage. The procedure is not without morbidity,[21] is significantly painful and seems best adapted to those recurrent cases secondary to generalized emphysema.[26] A 48 year old supply inspector had had one previous episode in the left chest reexpanded by trochar thoracotomy, and water seal drainage. X-rays taken at the time of his second spontaneous collapse revealed generalized bullous emphysema (fig. 4a). He was, therefore, poudraged with iodized talc by means of a thoracoscope and his left lung reexpanded by trochar thoracotomy tube water seal drainage. He is well and his lung completely expanded, seven months later (fig. 4b).

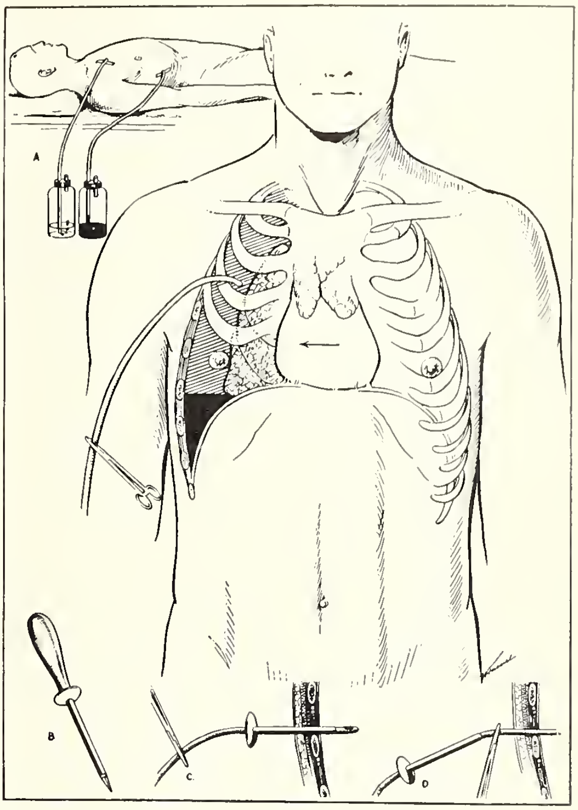

Fig. 3. Water seal chest tube to allow for the escape of air during inspiration. Insert a shows an additional lateral tube to remove pleural fluid. Insert b shows a trochar which is introduced into the pleural space through a stab incision to permit the introduction of a chest tube, insert c. Insert d shows the removal of the trochar.

More recently, exploratory thoracotomy for persistent and recurrent spontaneous pneumothorax has been advocated by several authors.[12, 13, 21, 26, 27, 10, 17] It is remarkable how commonly a localized and resectable cause for the air leak may be found.[19, 21] Also to be mentioned, is the necessity of concomitant decortication to remove the fibrous peel preventing reexpansion of the lung. The case shown in figure 2 in the present series is representative of this problem. A 32 year old railroad worker entered the hospital with a history of three spontaneous pneumothoraces on the left in the preceding two years. He requested a means of preventing further episodes. Despite an essentially negative x-ray (fig. 5), he was explored and the left apical subsegment was removed, as it contained a large apical bleb. There were no other discernible lesions. He is back at work three months later.

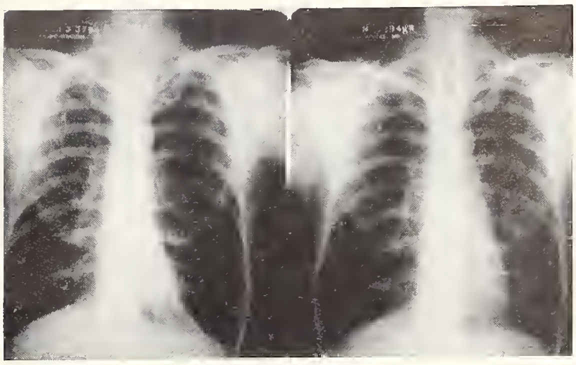

Fig. 4. a. Recurrent spontaneous pneumothorax in a patient with bilateral bullous emphysema. b: Seven months following pleural poudrage.

Therapeutic pneumothorax for tuberculosis may prove irreversible, approximately 10 per cent of cases develop a nonexpansile lung.[28] This results from the development of an encapsulating peel forming upon the pleura following an effusion. The pathology as described by Weinberg and Davis,[29] differs little from the hyalinized fibrous peel which will be described in consideration of hemothorax. Tubercle bacilli are not necessarily present in the peel. Decortication of this peel allows for reexpansion of the lung and has proven a reliable method of handling the potentially hazardous persistent pneumothorax cavity.[30] This procedure should be limited to those cases in which reexpansion will not prove deleterious to underlying parenchymal pathology.[31] A 28 year old Navy veteran developed pulmonary tuberculosis in 1945. Pneumothorax for a right apical cavity produced a prompt sputum conversion (fig. 6a). Seven years later, with a persistently negative sputum, an attempt was made to reexpand his right lung, with a resultant hemothorax (fig. 5b). At thoracotomy his lung was found to be encapsulated in a thick fibrous peel and the pneumothorax cavity filled with blood. No resectible disease was palpated within the lung. His lung did not completely reexpand following decortication (fig. 7a) necessitating a tailoring thoracoplasty of ribs 2 to 6 to obliterate the pleural space. He was discharged on antimicrobials and twelve months later is sputum negative and gainfully employed (fig. 7b).

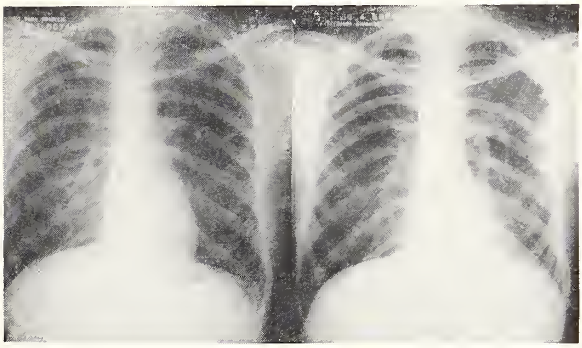

Fig. 5. a. Negative chest film in a patient with three spontaneous pneumothoraces on the left. b. After apical segmental resection for an emphysematous bleb.

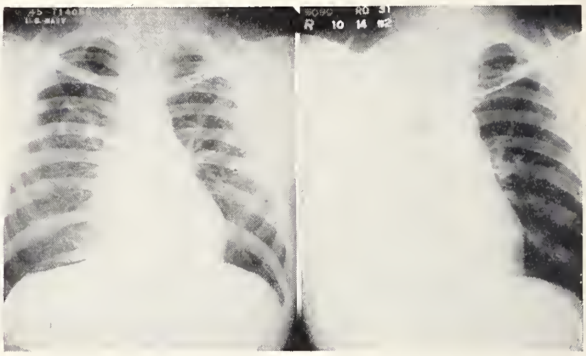

Fig. 6. a. Pneumothorax for a right apical cavity with positive acid fast sputum. b. Hemothorax seven years later on attempted reexpansion of the therapeutic pneumothorax that had produced sputum conversion.

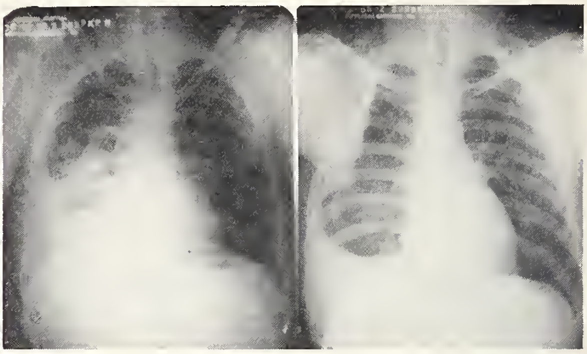

Fig. 7. a. Incomplete expansion of the right lung following decortication for hemopneumothorax of figure 5b. b. After a tailoring thoracoplasty of ribs 2 to 6.

Bronchoscopy has been performed in all cases prior to definitive therapy to rule out endobronchial pathology as a cause of persistent collapse.[32]

HEMOTHORAX

Blood in the pleural cavity is found clinically with neoplasm, tuberculosis, following trauma and in the so-called idiopathic group which is but a variant of spontaneous pneumothorax. Hemothorax develops in approximately three quarters of all cases of chest wounds.[33, 34] Prior to World War II much confusion existed concerning treatment of the traumatic hemothorax. Morelli, a pupil of Forlanini, popularized the replacement of air following aspiration of the blood in World War I.[35] This procedure did not recognize the chest wall as the main source of bleeding[2] and insured an incompletely expanded lung. As recently as 1936, Elkin believed most hemothoraces were readily absorbed.[36] Smithy was one of the first to point out the significant morbidity of traumatic hemothorax.[37] Empyema[38] and fibrothorax[39] were soon recognized as sequelae of the retained hemothorax. Frequent thoracenteses, with administration of systemic and intrapleural antibiotics,[40,41] removing as much blood as possible soon became the practice. Air was not replaced. Trochar thoracotomy with water seal drainage was not well adapted to the exigencies of war[34] but can be used as successfully when under close supervision.[42] The opinion has existed that blood did not clot in the pleural cavity.[43] Trousseau had demonstrated that blood actually clotted rapidly when injected into a horse's pleural cavity.[44] Melick[45] and Cosgriff[46] confirmed this observation and demonstrated that the clot was soon defibrinated with fibrin deposition upon the pleura. Contents of the pleural cavity were in reality whole blood which had been defibrinated by respiratory motion. Berry has estimated that approximately 20 per cent of battle and 10 per cent of civilian casualties develop an organizing hemothorax that cannot be aspirated.[47] Langston and Tuttle have accurately described the fibroblastic and angioblastic proliferation which soon organizes the soft clotted fibrin that has been deposited upon the pleura.[48] The center of the clotted space is occupied by loculated serosanguinous fluid with a shaggy attachment to the dense peel. The pleura itself does not become thickened, but in three to four weeks the more differentiated part of the peel, contiguous to the pleura, becomes organized into adult fibrous tissue. By seven weeks, arterioles with smooth muscle fibers can be demonstrated, while active fibroplasia progresses in the less differentiated portion, contiguous to the blood filled pleural cavity. As fibrosis progresses, contraction occurs and the lung parenchyma becomes infolded by the tough, elastic peel, resulting in a "captive" lung (fig. 8). While bacteria could be demonstrated in nearly 90 per cent of the peels removed in war wounds, many of these cases did not develop a true empyema, the fibrin peel preventing a normal leukocytic infiltration.[49]

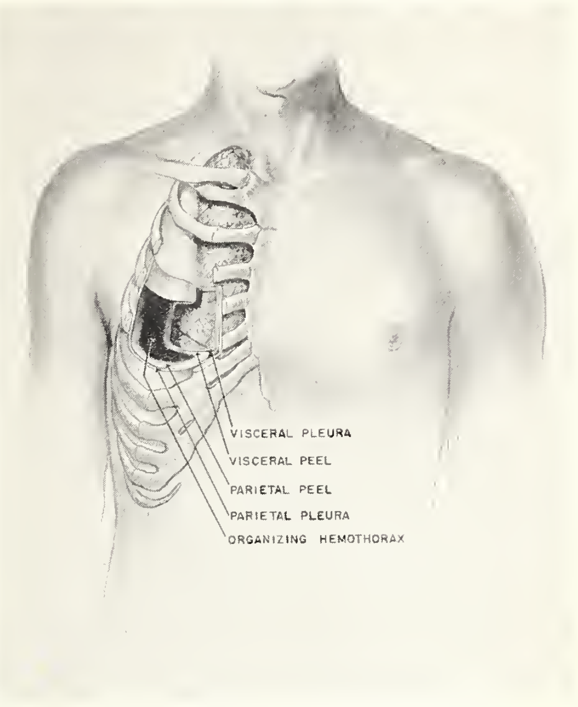

Fig. 8. The fibrous peel encapsulating the lung following a hemothorax.

Prior to World War II there had been sporadic attempts at reexpanding the encapsulated lung. Fowler[50] and DeLorme[51] in the last decade of the nineteenth century first recognized the shell, or false membrane, encapsulating the lung in cases of chronic empyema. The erroneous idea that this was in reality a thickened pleura was soon developed.[52, 53] Removal of the peel, or decortication, was only rarely employed for organizing hemothorax.[54, 55] The extension of indications for decortication were extended during World War II to include organizing hemothorax and posttraumatic empyema.[56] Decortication in the third to fifth week following injury produces reexpansion of the lung, obliterates the pleural space, and is now a well recognized and accepted procedure.[57, 58, 59, 60] Samson and Burford reported no mortality, minimal morbidity and 25 per cent minimal basal residual empyemas in 125 cases. Valle reported 88 per cent good results,[34] using decortication, in the Korean conflict. Nicholson had previously reported a 10 to 20 per cent mortality in these cases when not decorticated.[61] A 33 year old alcoholic suffered a self inflicted 22 caliber bullet wound of the left chest six days before entry. Debridement of the chest wall was undertaken at an outside hospital. On admission, he had a fever of 101 F., a hemoglobin of 8 gms., and an air fluid level at the first interspace anteriorly by x-ray (fig. 9a). Aspiration of 500 cc. of blood in the midaxillary line was followed by an anterior and lateral trochar thoracotomy chest tube and water seal drainage. Intrapleural and systemic antibiotics were utilized. His x-ray remained essentially unchanged and decortication of an organizing noninfected hematoma was undertaken sixteen days following injury. His lung reexpanded and was maintained on water seal drainage. He convalesced unremarkably well and his x-ray six months later revealed a well expanded lung (fig. 9b).

With the introduction of enzymatic debridement by Tillet,[62] Streptokinase and Streptodornase have been used successfully in aiding the aspiration of organized hemothorax.[63, 64] A review of cases in the literature by Carr and Evans reveals comparable results to repeated aspirations.[65] This view is supported by Debakey.[66] Its use was discontinued in Korea because of a marked febrile response unattended by clinical improvement.[34]

Spontaneous hemopneumothorax has been rarely described in the literature, there being sixty cases in 1951,[67] with a fatality rate of 25 per cent.[68, 69] Actually the disease is neither rare[67] nor fatal when properly managed. Therapy was originally directed toward slow removal of blood and replacement with air to insure a positive pressure.[70, 71, 72] Such treatment committed the patient to a prolonged convalescence[73] if he survived the initial episode. Waring[74] and Simpson[75] advocated early and frequent aspiration. Sellors[76] presents the present day concept: "The essence of recovery from a hemothorax is that the lungs should reach the chest wall and obliterate any pleural cavity at the earliest moment. If fibrin develops before the pleura becomes opposed, the closure is mechanically delayed. The risk of fibrothorax develops."

If progressive hemorrhage is apparent during the acute episode, thoracotomy is indicated. The bleeding point is usually located in a torn adhesion or ruptured bleb.[69] Should the hemothorax become organized, the encapsulated lung should be decorticated.[78, 79] A 31 year old salesman entered the hospital with a history of chest pain, spontaneous in onset, of three weeks duration. His right chest had been repeatedly aspirated at an outside hospital with resultant bloody fluid. On admission he had a right hemopneumothorax (fig. 10a), which was decorticated after negative studies concerning tuberculous etiology. He was discharged following an uneventful convalescence with a well expanded right lung (fig. 10b). He is well fourteen months later.

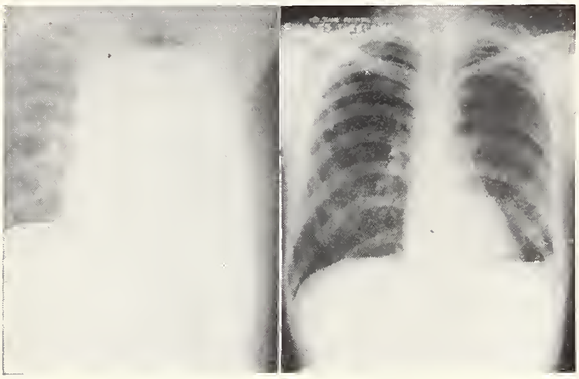

Fig. 9. a. Traumatic hemothorax following 22 caliber bullet injury. b. Nine months after decortication.

EMPYEMA

Empyema clinically may be divided into a postpneumonic or post-traumatic etiology. It is important to differentiate between these two origins in consideration of recent knowledge. The contribution of the first World War concerned pneumonic empyema, World War II, post-traumatic empyema. Since the advent of antibiotics, the incidence of postpneumonic forms have decreased markedly.[80, 81]

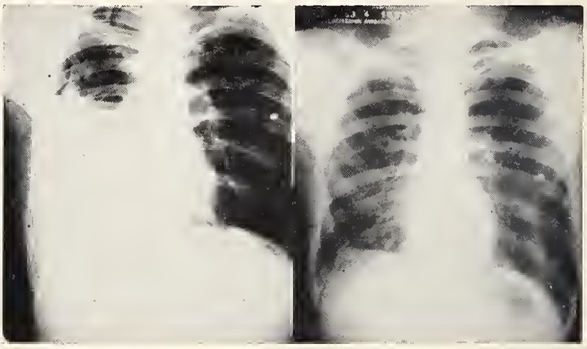

Fig. 10. a. Spontaneous hemopneumothorax of the right chest. b. Completely expanded lung nine months after decortication. (The shadow in the right chest at the base has lung markings extending beyond it, and represents regenerating rib.)

Prior to World War I paracentesis,[82] intercostal drainage[83] and open drainage following rib resection[84] were employed with varying success. Hippocrates may have realized the necessity for proper timing of open drainage. "Those cases of empyema which are treated by incision or the cautery, if the water flows rapidly all at once, certainly prove fatal. When empyema is treated, either by the cautery or excision, if pure and white pus flow slowly from the wound, the patients recover."[85] With the epidemic of pneumonia in 1917-1918, interest again became directed toward therapy of postpneumonic empyema, owing to the high mortality following open drainage. The Empyema Commission soon realized the time for open drainage was in the postpneumonic phase when the mediastinal structures and lung were fixed and the pus were thick. Earlier drainage had added pneumothorax to the already diminished respiratory abilities of the pneumonic lung.[86] With the avoidance of pneumothorax during the period of active pneumonia, was the associated recommendation for early sterilization and obliteration of the cavity, as well as maintenance of nutrition. Mortality at Camp Lee, Virginia, fell from 40 per cent to 4.3 per cent when these recommendations were adopted.[87] A persistent cavity was usually obliterated with a Schede thoracoplasty, although Graham well recognized the true pathology of the encapsulated lung.[86] The principle of early lung expansion as a means of obliterating the traumatic empyema cavity was a natural outgrowth of the technics of decortication in organizing hemothorax.[88] Decortication of encapsulated lung following empyema had been attempted sporadically prior to this time,[50, 51, 54] but closed water seal drainage, antibiotics and endotracheal anesthesia were all necessary to enable the thoracic surgeon to "successfully convert the localized empyema into a generalized pleural contamination in order to gain reexpansion of the lung."[89] Lung function was restored and the deleterious effect of prolonged pleural sepsis lessened. The principles of post-traumatic empyema have now been extended to those postpneumonic cases that do not respond to repeated aspiration and antibiotics. Open drainage is being employed less often in favor of early decortication.[90] A 40 year old river boatman entered the hospital with a history of cough, fever, pain in the right chest and loss of forty pounds. Aspiration of the fluid at his right base (fig. 11a) cultured pneumococci. Bronchoscopy was negative. Primary decortication of the encapsulated empyema was followed by an uneventful convalescence and he was discharged on the twelfth postoperative day. When seen four months later (fig. 11b), he had gained fifteen pounds and was asymptomatic, back working on the river boat.

In the infant, early closed water seal drainage is mandatory[90] as the empyema often communicates with a bronchopleural fistula, causing aspiration and asphyxiation. Enzymatic debridement of empyema cavities may provide for continued reexpansion of the lung[91, 92] but also may prolong the period required for stabilization of the thoracic contents prior to open drainage.

Tuberculous empyema requires special consideration. Brock emphasizes: "1) That tuberculous empyema is a serious condition which must be treated with respect, 2) that treatment must be prompt and vigorous; that conservatism fails in most cases."[93] Alexander reports a 41 per cent mortality in tuberculous empyema[94] and a 70 per cent mortality is reported in mixed empyema.[95] The best results are obtained by pleural obliteration and if this can be achieved by expansion of the lung this is to be desired, providing there is no serious underlying parenchymal disease. Repeated aspiration may be followed by thoracoplasty if such disease exists. Decortication has been employed successfully in cases with quiescent disease.[96, 97, 98] While some have advocated conservative treatment,[99] this is supported by small selected series of cases.[93] Sarot has advocated extrapleural pneumonectomy[100] in selected cases.

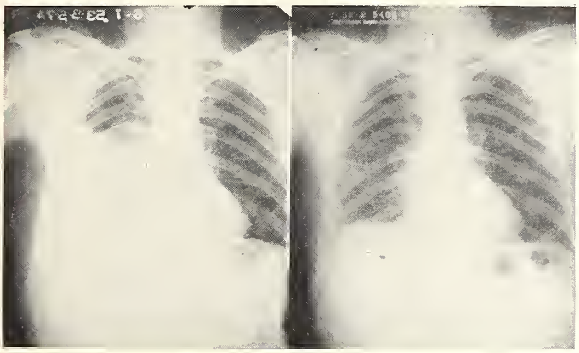

Fig. 11 a. Encapsulated empyema at the right base. b. Four months following decortication.

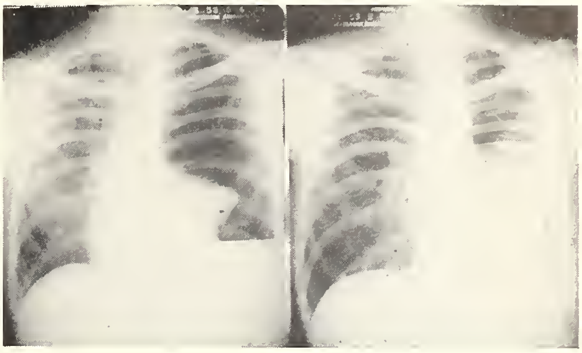

Fig. 12. a. Mixed acid-fast empyema and pneumothorax. b. Reexpansion following closed and open drainage, awaiting thoracoplasty.

In mixed empyema, open drainage is necessary but should be followed in a matter of days by thoracoplasty[93] unless minimal underlying disease is evident. In the latter case, decortication and resection may be successful. By such prompt therapy Brock reports a reduction in mortality from 77 to 14 per cent.

A 31 year old male was well until eleven days prior to admission when he experienced the sudden onset of dyspnea and left chest pain. On admission he was acutely febrile, coughing and x-ray was consistent with pyopneumothorax (fig. 12a) which on aspiration yielded acid-fast bacilli and streptococci. Anterior and lateral closed water sealed chest tube drainage was instituted with slow and partial reexpansion of the lung (fig. 12b). He was placed on antimicrobials and following stabilization of the lung and mediastinum open drainage through the sixth rib was performed. Over the following four months the empyema cavity was obliterated by a staged thoracoplasty of ribs 1 to 9. He is now sputum negative, has regained his normal weight and his chest tube has been removed (fig. 12).

SUMMARY

Problems of the pleural space are concerned with the altered respiratory and systemic effects of mediastinal shift, fibrothorax, and sepsis. Three basic principles may be stated: (1) all therapy should be directed toward obliteration of the space; (2) the time and method of this obliteration depends on the underlying pathology encountered, and (3) emphasis has recently been placed on a direct approach to the thoracic pathology by means of thoracotomy in those cases refractory to the usual means of obliteration of the space.

Pneumothorax, hemothorax and empyema have basic similar features for they occur in a pathologically developed space at the expense of respiratory function and carry a potentiality for chronicity and prolonged sepsis. Therapy should be directed toward early obliteration of the pleural space. This is to be obtained by removal of the pleural contents and reexpansion of the lung, often aided by thoracotomy should simple methods fail. When lung reexpansion is impossible or inadvisable, obliteration of the space is obtained by collapse of the chest wall.

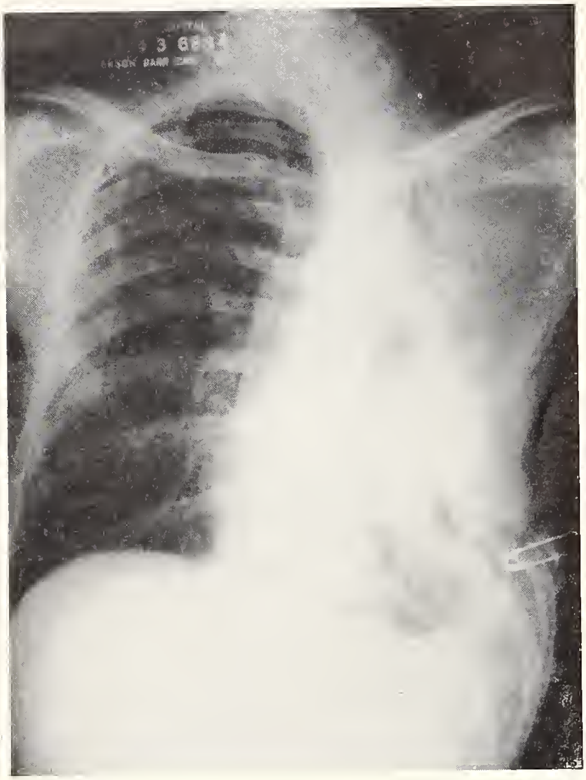

Fig. 13. Obliteration of the mixed tuberculous empyema cavity by a staged nine rib thoracoplasty with sputum conversion.

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Statements and conclusions published are a result of his own study and do not necessarily reflect the opinion or policy of the Veterans Administration. These patients were treated at the Veterans Administration Hospital, Jefferson Barracks, Mo.

M. S. M. A.
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M. S. M. A. Annual Session
Hotel President and
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Special Article

Ethics Within the Profession

PAUL R. HAWLEY, M.D., *Chicago*

THE REASON I AM talking to you upon this subject is that your Society requested me to do it. I do not consider myself an authority on medical ethics. In fact, you can find a lot of doctors who will tell you that I do not know anything about ethics.

It is quite true that I have devoted little time to the formal study of medical ethics. Because I have long been interested in the history of medicine, I know something about the historical development of the Code of Ethics. But I learned the most I know of medical ethics from growing up in a family of dedicated physicians, and in practicing medicine in partnership with my father.

I am speaking to you as a general practitioner, because that is the only kind of clinical medicine I have ever practiced. My graduate training in medicine was in the field of preventive medicine, and I have never been a clinical specialist, nor have I ever posed as one.

The present Code of Ethics of the American Medical Association is being revised, as you know. One of the revisions which is contemplated, so I am informed, is the separation of the rules of professional conduct between physicians from the rules of conduct of a physician with a patient. If this is done, it will go a long way toward clarifying the Code of Ethics. Actually, few ethics are involved in the conduct of one physician with another. Such rules are rules of etiquette rather than rules of mortality.

Unfortunately, the public's knowledge of medical ethics, so-called, is largely confined to these rules of etiquette. As you know, the public often regards these rules with amusement, as being archaic and not in step with the present. This is particularly true of the rule prohibiting personal publicity of physicians as distinguished from frank paid advertising.

Nevertheless, these rules of professional etiquette are important. For one reason, they distinguish a dignified profession from a trade or business; and I hope we shall always preserve this distinction. Unfortunately, there appear to be some members of the profession who regard the practice of medicine as a business, and who apply to it the rules, or lack of rules, which govern the market place.

Despite the inclusion of these rules of etiquette in the Code of Ethics, the real ethics of medical practice are limited to the morality of medical practice. Webster defines ethics as "the science of moral duty; more broadly, the science of the ideal human character and the ideal ends of human action." He goes on to say that "the chief problems with which ethics deals concern the nature of the . . . highest good, the origin and validity of the sense of duty, and the character and authority of moral obligation."

This, it seems to me, makes medical ethics an extremely simple matter. To apply this general definition of ethics to the specific field of medical practice, we need say only that medical ethics is the science of the moral duty of a physician, the science of the character of the ideal physician, and of the ends of his professional actions. That is all there is to medical ethics.

It is only when we begin to spell out the possible transgressions of this general law that we encounter difficulty. As written today, the Code of Ethics spells out precious few of the many possible violations of moral law as applied to medical practice; and some physicians seem to believe that an action is ethical unless specifically prohibited by the Code of Ethics.

For example, the only actions specifically prohibited in the Code of Ethics of the A.M.A., prior to the most recent modification, were:

a. Solicitation of patients.

b. Releasing to the press of medical information which promises radical cures, or boasts of cures or extraordinary skill or success.

c. Receiving remuneration from patents on, or the sale of, surgical instruments or appliances; profit from a copyright on methods or procedures; and engaging in barter or trade in appliances, devices or remedies.

d. Prescription or dispensing of secret remedies.

e. Violation of laws regulating the practice of medicine, or assisting others to do so.

f. Basing his practice on an exclusive dogma or a sectarian system, or consulting with a cultist.

g. Violation of the confidences of a patient.

h. Certain types of contract practice.

i. Giving or receiving of commissions for the referral of patients.

All other provisions of the Code of Ethics are either in the form of advice as to what to do, rather than what not to do, or are tempered by the use of indefinite forms of auxiliary verbs.

Of these nine specific prohibitions in the Code of Ethics, only two deal with the physician's relations with the patient. These are that the physician will not violate the confidence of a patient; and that the physician will not give or receive a commission for the referral of a patient.

It is the latter prohibition which has been the cause of considerable controversy in the profession in the last year or two. While only a few physicians openly advocate the giving and receiving of commissions for the referral of patients, there is more disagreement as to what constitutes a commission, and the extent to which this rule should be applied. The records of the reference committees of the A.M.A. will show that the complete abolition of this rule has been advocated by members who have appeared before the committees. I heard one such speech, made at an A.M.A. Convention, in which the doctor referred to his practice as a business which he had built, and to fee-splitting as the great American way of doing business.

Other delegations have attempted to obtain the

Presented at the 100th Anniversary Conference of the Clay County Medical Society, Excelsior Springs, November 4, 1954.

Director, American College of Surgeons.

A.M.A.'s sanction of new methods of financial dealings with patients. They point out, often with complete accuracy, that the methods they advocate are not the giving or receiving of commissions. The result is that many physicians of unquestioned integrity are confused. The reason they are confused is because the giving and receiving of commissions has been made the only sin specified; whereas the frank splitting of a fee is only one way of dealing unethically with a patient. The alternate billing of patients by referring physicians and specialists is not the giving and receiving of commissions in the strict sense. Each doctor pockets the entire fee in alternate cases. The habitual use of referring physicians as assistants, with large fees for such services, is not strictly the giving and receiving of commissions. Neither is lavish gifts at Christmas or on other occasions. Yet both the intent and the result are the same.

It is high time, I think, that this question of financial relationships with patients is placed in its proper perspective. To do this, we have only to answer the question, "What is the duty of the physician to the patient which he refers to another physician for treatment?"

I do not think that there is anyone in this room who would answer this in any other way than that the duty of the physician is to seek the best treatment available for his patient. If he chooses a consultant or a specialist who is not, in his opinion, the best available, he has failed the trust placed in him by the patient. If he refers his patient to a specialist to whom he himself would not go in similar circumstances, or would not send one of his immediate family, he has not been faithful to that patient; yet I know quite a few surgeons who have operated upon doctors and doctors' families but who have never had another patient referred to them by these doctors. One reason for this would appear to be obvious—the referring doctors sought the best for themselves but were influenced by other considerations when seeking help for their patients.

The issue could be made completely clear if the sin were declared to be violation of the trust of the patient. The medical profession has only to say that it is unethical to offer, give or receive any inducement for the referral of patients other than the quality of professional care desired or expected. This takes care of the real sin, and covers all possible ways of circumventing the present prohibition against the giving or receiving of commissions. It makes the interests of the patient the only acceptable consideration in the choice of a consultant.

However, fee-splitting and other immoral forms of inducement are not the only evils which the profession must guard against. It may surprise you to learn that I do not regard fee-splitting as the most serious sin in medical practice. It seems to have caught the fancy of lay reporters and writers, and has been given more publicity than other evils which I personally consider to be more serious. I hasten to add that I consider fee-splitting to be a grave evil, but largely because of the other evils it creates, and not because of the mere splitting of a few dollars of the patient's money.

Measured by the effect upon patients—and this includes all of our people—I think that unjustified surgery is the most serious evil in medical practice today. Fee-splitting contributes to unjustified surgery, but is by no means responsible for all of it. Many unjustified operations are done by surgeons whose financial dealings are above reproach. There is a difference, which I am sure you understand, between "unnecessary surgery" and "unjustified surgery." The ablest and most conscientious surgeon occasionally makes an honest mistake in his preoperative diagnosis; and sometimes finds at operation that surgery was not really necessary. Yet the operation may have been fully justified by the history and the signs and symptoms.

I would not know how much unjustified surgery is being done in this country. I do know that in the occasional medical audits made, there are encountered such figures as 75 per cent of appendectomies, 60 per cent of hysterectomies, 80 per cent of uterine suspensions, which cannot be justified by careful study of the case records and reports of the pathologists. We have yet to encounter the perfect surgeon; but we do find that the proportion of unjustified surgery done by able and honest surgeons is extremely low, and, by "able and honest surgeons," we do not mean only the professors of surgery in large teaching institutions. We also find them in small hospitals in small cities.

When, some months ago, the American College of Surgeons spoke out against ghost surgery, there were a number of hoots of derision from the profession. Some denied even that there was such a practice. Since that time, numerous instances of such practice have come to light, in one form or another. I do not intend to devote any time to this question other than to say that it does exist.

With respect to ghost surgery, there has risen a serious problem in connection with graduate training in surgery. You are all aware of the rapidly diminishing number of free beds in our teaching hospitals. This is the result of two factors in the changing economy of medical care. One is the financial difficulties of hospitals, which requires them to obtain as much revenue as possible from all beds. The other is the rapid growth of plans for the prepayment of the costs of medical and hospital care, which has greatly reduced the number of medically indigent people in our population.

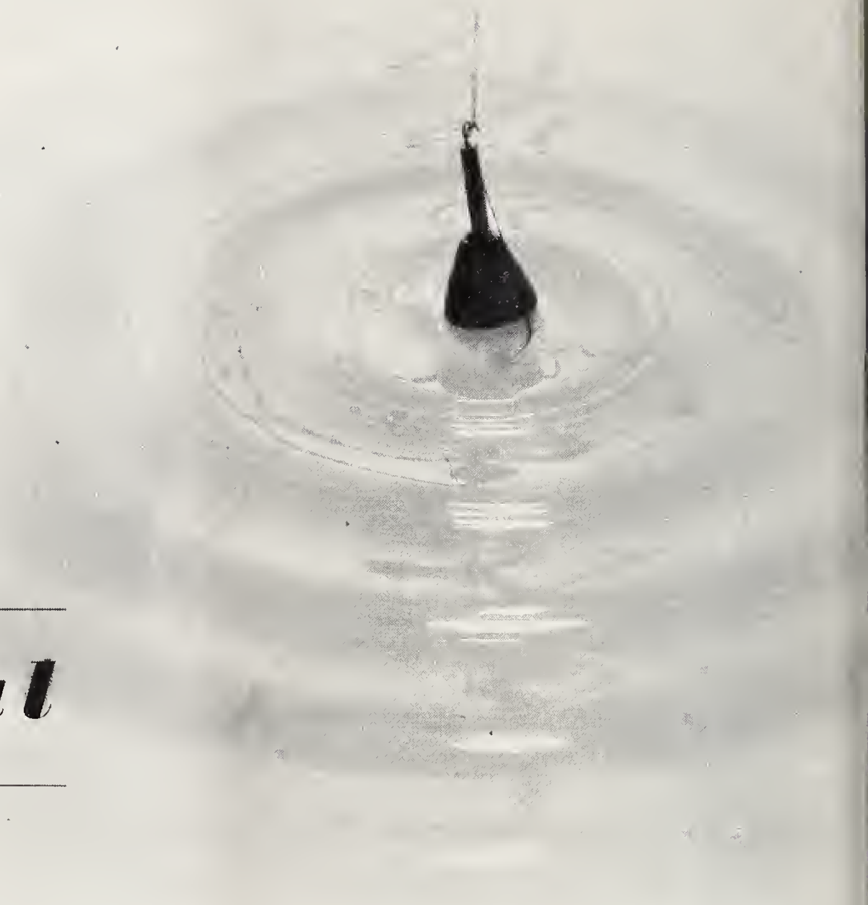
This reduction in the number of public patients is having a serious effect upon programs of graduate training in surgery. The various accrediting bodies take the logical position that the trainee must actually do surgery before he can be called a surgeon. The diminishing number of free beds is making patients scarce for residents in many hospitals. How, then, is the resident in training going to satisfy the requirement of doing surgery?

Remembering that insured patients are regarded as private patients, even though occupying a ward bed, where are the patients to come from who will afford the resident the opportunity for independent surgery, even if closely supervised by a preceptor?

This question has not been answered satisfactorily. Be it ever to the credit of surgeons, however, the opinion is overwhelming that deception of the patient as to who is the operating surgeon cannot be justified; and that any solution which is satisfactory must include honesty with the patient.

I have now occupied many minutes of your valuable time in saying what could be said in sixty seconds. It has been said before that medical ethics are only a pattern of simple honesty. Every important aspect of medical ethics can be covered by honest answers to four questions:

(Continued on page 72)



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EDITORIALS

Annual Session to Have Outstanding Program

While the program for the ninety-seventh annual session of the Missouri State Medical Association is not quite complete, it already promises to be one of the most informative and practical which has been presented.

Television, which at several sessions has brought the member attending right at the elbow of the surgeon or the diagnostician, will again be presented through the courtesy of Smith, Kline and French Laboratories. Maxwell G. Berry, M.D., Kansas City, Chairman of the Committee on Scientific and Postgraduate Work and in charge of the program for the annual session, has a special television committee arranging the procedures at Kansas City General Hospital which will be televised into the Little Theater of the Municipal Auditorium.

Among guest speakers on the scientific program are Elmer Hess, M.D., Erie, Pennsylvania, President of the American Medical Association, who will address the House of Delegates and speak before the scientific session on "Management of Cancer of the Prostate"; Clarence D. Davis, M.D., Columbia, will speak on "Management of Occiput Posterior"; Philip Thorek, M.D., Chicago, will talk on "Intestinal Obstruction"; Louis Soloff, M.D., on "The Effect of Mitral Valve Surgery on the Prognosis of Individuals with Mitral Stenosis"; Francis C. Murphy, M.D., Milwaukee, on "Acute Renal Insufficiency (Lower Nephron Nephrosis)"; Irvine H. Page, M.D., Cleveland, on "Treatment of Arterial Hypertension"; L. Henry Garland, M.D., San Francisco, "Chest X-ray in the Diagnosis of Lung Cancer"; Priscilla White, M.D., Boston, "Diabetes in Children," and George Crile, M.D., Cleveland, on "Cancer: An Evaluation of Surgical Treatment."

Round table luncheons on Monday and Tuesday will furnish discussion sessions.

The Annual Banquet in honor of Past Presidents, at which H. E. Petersen, M.D., St. Joseph, President, will preside and install Victor B. Buhler, M.D., Kansas City, as the new President, will be held at the Hotel President on Tuesday evening, March 29.

All sessions will be held in the Municipal Auditorium and Hotel President.

Look, Mister Berg, Look

Look's medical editor, Roland H. Berg, in the October 5 issue captions an article, "Are Your Doctor Bills Padded?" A few abstracts from Mister Berg's article follow. The quotations are his.

"The cause of a patient's relapse can often be traced to a single factor . . . the specter of unpaid doctor bills." Also, Mister Berg, to increased taxes, waste, inflation and communist infiltration, all products of new deal philosophy. The psychiatric wards are filled.

"Today, although their personal reputations may be unsullied, physicians as a group are frequently labeled selfish, mercenary and reactionary." Thanks to authors like you, Mister Berg.

"Sedate medical meetings, normally devoted to a quiet interchange of scientific opinions, have become the sounding boards of heated charges of fee splitting, ghost surgery and medical gouging." How many of these meetings have you attended, Mister Berg?

"If your family is average, medical care cost you $205 last year." Can you think of anything as important as family medical care that can be purchased on today's inflated market more reasonably?

"That American medicine is rather good for doctors is attested by Harvard Professor of Economics, Seymour Harris. He says, 'The average income of physicians is about three times the average of college professors and nearly four times that of factory workers. Granting the length and cost of medical training, there is a serious question whether there is any justification for such a discrepancy.' " No consideration for long hours of overtime, personal sacrifice and delayed years of earning power?

After these statements, Mister Berg has the temerity to ask, "What makes people so critical of physicians collectively, yet so respectful of them as individuals? It's a paradox that has doctors worried?" We are not worried. We are, however, concerned and interested particularly in the psychology of authors of this type. What manner of men are they? Are they truly Americans? What prompts them to write articles of this type? Are they, or were they ever, members of this or that? I am sure that if they would reread their articles while gazing in a mirror they would see faces as red as the proverbial Herring.

Martyn Scattyn, M.D.

American Medical Association Clinical Session

Geriatrics, medical ethics, internships, grievance committees, hospital accreditation, osteopathy, the doctor draft law, state-subsidized medicine and malpractice insurance problems were among the major subjects of discussion and action by the House of Delegates at the American Medical Association's Eighth Clinical Meeting held Nov. 29 to Dec. 2 in Miami.

During the meeting the A.M.A. Board of Trustees also announced the appointment of a 13-member Commission to make a comprehensive survey of the various types of plans through which the American people receive medical services. The Commission, headed by Dr. Leonard W. Larson, Bismarck, N. D., member of the Board of Trustees, will begin work immediately and will require at least a year to complete its survey.

Named as the 1954 General Practitioner of the Year was Dr. Karl B. Pace, Greenville, N. C. Dr. Pace received the medal and citation, presented annually for community service by a family doctor, from Dr. Walter B. Martin, Norfolk, Va., President of the American Medical Association, immediately after the announcement.

Other highlights of the opening session were addresses by Dr. Martin; Mr. Seaborn P. Collins, National Commander of the American Legion; Mrs. Oveta Culp Hobby, Secretary of Health, Education and Welfare, and Mr. Edwin J. Faulkner, President of the Woodmen Accident and Life Company of Lincoln, Neb.

Mr. Collins told the House that he is willing to appoint qualified Legion representatives on a committee to take part in joint Legion-A.M.A. study of veterans' hospitalization. Later during the meeting the Board of Trustees announced appointment of a three man committee to meet with the Legion on the issue of veterans' medical care. The members of the A.M.A. committee are Dr. Elmer Hess, Dr. David Allman and Dr. Louis Orr.

Registration toward the end of the third day of the Clinical Meeting included 3,167 physicians; 3,441 guests including residents, interns, nurses and others, and approximately 900 exhibitors and exhibitors' guests—for a grand total of more than 7,500. Final total registration at the 1953 Clinical Meeting in St. Louis was 7,716.

The Expanding and Changing Universe

Today demand is nearly always in excess of supply. This seems to apply to about everything: liquor, automobiles, highways, transportation, tobacco, hospitalization, nursing care, medical and surgical care, medical education, hot dogs and hamburgers, motels, labor (when you try to get it), capital (when you try to get it), movies, television sets, parking places—and, this summer, even water. We build four lane highways and in no time they are more crowded than were the preexisting two lane highways. A city after doubling its hospital bed capacity finds its hospitals more crowded than ever. A huge circus comes to town and even after a three years' drought the community packs to overflowing the two performances given. People are anxious to, at the drop of a hat, absorb on a tremendous scale anything offered in the way of material benefit (be it slight or great), and anything offering amusement or (sometimes dubious) pleasure.

At our local fair there has been provided for the last two years a Red Cross station with medical and nursing attendance. It is surprising to note how many people stopped by for care—mostly for incipient blisters, scratches, headaches and tiredness from the heat. We remember back to our boyhood days when our tri-county fair was a big event. As far as we can remember, no medical care was sought from or offered by the fair. We do remember one near tragic occasion connected with the main attraction—the balloon ascension. While the balloon was being inflated with heated air it had to be held down until finally ready for its ascension. This was done by volunteers who held on to hold ropes. At the last minute when the balloon was sufficiently inflated and the balloonist ready everyone would let go and up would go the balloon with the balloonist waving from the suspended basket. On the unfortunate occasion in mind one of the volunteers was a tipsy old Civil War veteran. He was quite a drunkard and although on the "black list" would contrive to get enough lemon extract for an occasional "toot." When the other volunteers holding down the balloon let go of their ropes he drunkenly fumbled and got his leg entangled with his hold rope. Up he started to go with the balloon—to everybody's thrilled horror. At about thirty feet up he finally and desperately kicked himself loose and fell to the ground. One of our local doctors was hurriedly summoned from town to his aid—the doctor's buggy careening behind his galloping horses. The crowd that day got its biggest thrill from this exciting incident. The poor old soldier got only a fractured humerus and a general bruising.

But we have digressed. Demand in general is expanding beyond comprehension. We are living right in the midst of rapid expansion. In particular, demands for medical care and hospitalization are expanding. People are becoming vastly more and more doctor minded and, given the opportunity to seek medical advice (even for trivialities), they flock to do so. Witness the log book at our local fair Red Cross station. This is a trend which we must not ignore even though we do not entirely understand it. Businessmen sometimes can understand analogous trends (or maybe they are just lucky), and they reap rewards and found big business enterprises.

We must try to understand our situation not for financial profit (and we are not in a position to so profit)—but to live up to our ideals and what we have dedicated ourselves to, and to preserve our present form of practice. We must learn to gauge

(Continued on page 66)

Missouri Medical Meetings

Missouri State Medical Association, Kansas City, March 27-30, 1955.

St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.

Barton-Dade County Medical Society—third Wednesday of each month.

Benton County Medical Society—meets only on call.

Boone County Medical Society—first Tuesday of each month.

Buchanan County Medical Society—first Wednesday of each month.

Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.

Callaway County Medical Society—third Thursday of each month.

Cape Girardeau County Medical Society—first Monday of each month.

Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.

Clay County Medical Society—last Tuesday of each month.

Clinton County Medical Society—meets only on call.

Cole County Medical Society—first Monday of each month.

Cooper County Medical Society—first Monday after the 15th of each month.

Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.

Dunklin County Medical Society—first Tuesday of each month.

Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.

Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.

Greene County Medical Society—fourth Friday of each month.

Henry County Medical Society—meets only on call.

Holt County Medical Society—meets only on call.

Howard County Medical Society—meets only on call.

Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.

Jasper County Medical Society—second Tuesday of each month, September through May.

Jefferson County Medical Society—meets only on call.

Johnson County Medical Society—meets only on call.

Laclede County Medical Society—second Monday of each month at 6:00 p.m., at the Louise Wallace Hospital, Lebanon.

Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.

Lewis-Clark-Scotland County Medical Society—meets only on call.

Lincoln-St. Charles County Medical Society—third Thursday of each month.

Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p.m.

Miller County Medical Society—meets only on call.

Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.

Moniteau County Medical Society—second Thursday of each month.

Newton County Medical Society—meets only on call.

Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.

North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.

Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.

Pemiscot County Medical Society—third Thursday of each month.

Perry County Medical Society—second Thursday of each month.

Pettis County Medical Society—third Monday each month September through May.

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.

Pike County Medical Society—third Tuesday of each month.

Platte County Medical Society—meets only on call.

St. Louis County Medical Society—second and fourth Wednesday of each month.

St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.

Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.

South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.

Vernon-Cedar County Medical Society—meets only on call.

Webster County Medical Society—meets only on call.

West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

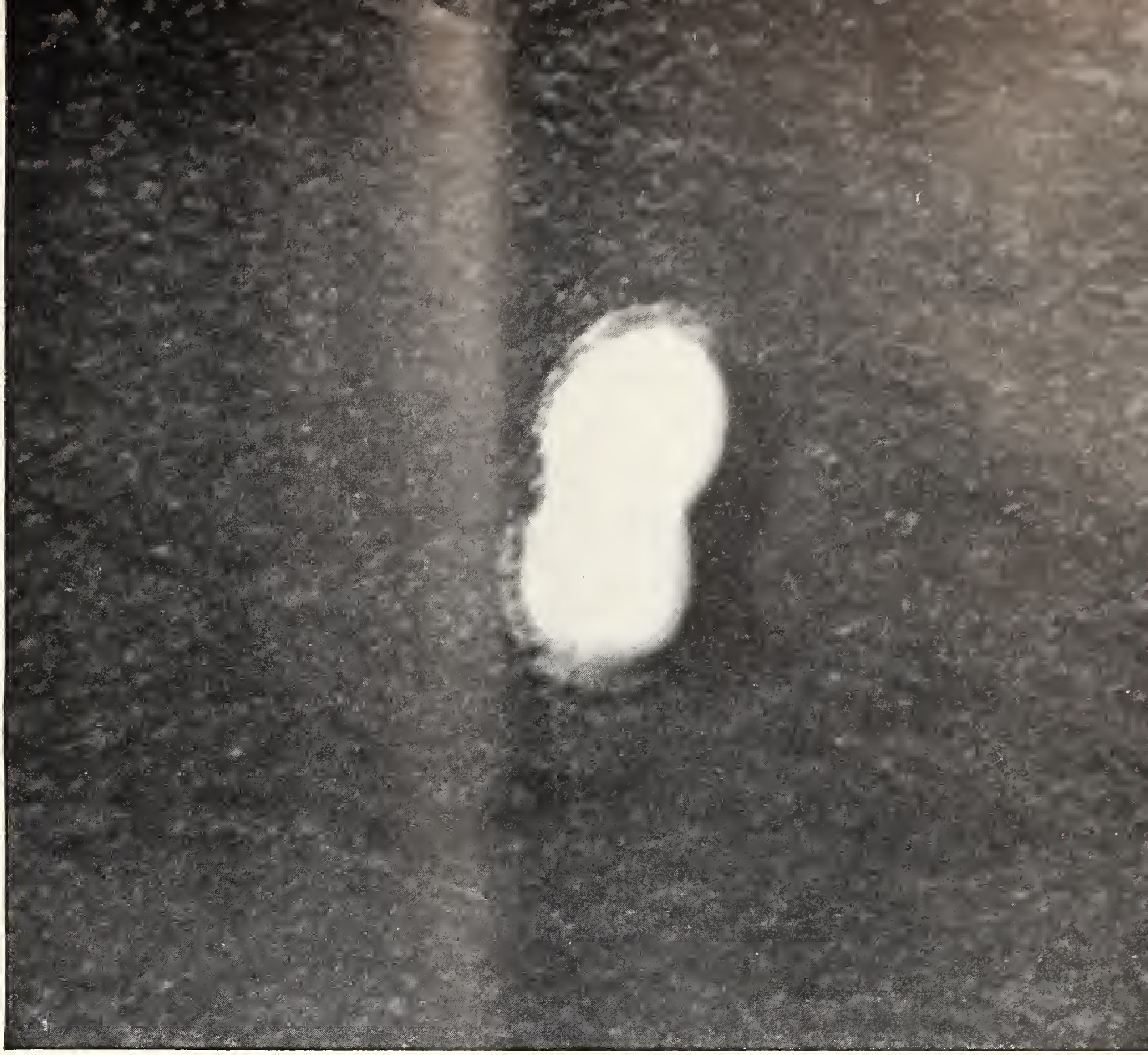
Dr. Frank R. Bradley, director of Barnes Hospital and President of the American Hospital Association, speaking at a luncheon session of the annual meeting of the Missouri Hospital Association in St. Louis, Thursday, December 2, stated that closer and more communication between physicians and hospitals is needed and that legal action is not the way to determine the respective functions of the two. He pointed out that many state medical practice laws need revising to better set forth the field of services within the provinces of the two groups.

Dr. W. D. Bryant, Executive Director, Community Studies, Inc., Kansas City, speaking on "Community Planning Is a Must," said that in his opinion some hospitals were being built, or added to, in various places over this state without due consideration for actual need. He pointed out that in such cases the sponsors of these hospitals were mainly interested in "keeping up with the Joneses" or promoting their particular group or individual interests. His plea was for more and better planning for hospitals as determined strictly by the hospital needs of a community or city.

The information presented to the Hospital Association audience by John D. Paulus, Jr., Jefferson City, Department of Hospital Facilities, Missouri Division of Health, to some extent might be used to bolster Dr. Bryant's contention. Mr. Paulus stated that the state as a whole has some $50,000,000 worth of hospital projects pending. The question is—how much study, and by whom, has been given to the determination of the real need for $50,000,000 of pending hospital construction? Missouri received, for the last fiscal year, $1,185,000 in federal aid through the Hill-Burton Act for hospital and related facility construction. Mr. Paulus said that applications in Missouri for aid under this act are now pending for $14,000,000 worth of projects.

The Auxiliary to the Pettis County Medical Society for the second straight year won the award for Doctor's Day for organizations with less than seventy-five members at the annual meeting of the Southern Medical Association in St. Louis, November 8 to 12. The Auxiliary's exhibit included newspaper publicity on Doctor's Day, window display pictures, flash photos of all the windows, and a poster with pictures of many things at their banquet including the serving of dis-

(Continued on page 72)



ELECTRON PHOTOMICROGRAPH

Diplococcus pneumoniae 44,000 X

Diplococcus pneumoniae (Streptococcus pneumoniae) is a Gram-positive organism commonly involved in

lobar—and bronchopneumonia • chronic bronchitis • mastoiditis • sinusitis otitis media • and meningitis.

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Members in the News

A birthday cake, complete with candles, was the centerpiece for a dinner given by his family for **J. R. Bridges**, M.D., Kahoka, on his 91st birthday, October 19.

Attending the Postgraduate Seminar on Gastroenterology at the University of Pennsylvania November 8 to 12 was **Arthur C. Clasen**, M.D., Kansas City.

Among 182 physicians elected to fellowship in the American Academy of Pediatrics recently were Robert H. Friedman, M.D., and J. Neal Middelkamp, M.D., St. Louis.

A centennial Celebration of Union Memorial Hospital, Baltimore, was attended by **James A. Jarvis**, M.D., Kansas City.

Among participants in a discussion on Operations Progress over KWK-TV, St. Louis, on November 14, was **Alphonse McMahon**, M.D., St. Louis, immediate past president of the Southern Medical Association. The discussion dealt with conventions in St. Louis.

The *Sedalia Democrat-Capital* and the Pettis County Medical Society presented the third in a fall series of Pettis County Medical Forums on November 23. **Albert Preston, Jr.**, M.D., Kansas City, discussed "Mental Health."

The Section on Allergy of the Southern Medical Association elected **Cecil Kohn**, M.D., Kansas City, as secretary, during the recent St. Louis session.

The cornerstone of the new $2,000,000 Fowler Memorial Wing of St. Luke's Hospital, St. Louis, was laid November 6. Among those participating in the ceremony was **Hiram S. Liggett**, M.D., St. Louis.

The Doctors Medical Foundation, St. Louis, gave a ball on November 16 at Hotel Chase, proceeds of which were for the hospital building program.

One of the principal speakers at the annual forum held at the Missouri College of Agriculture of the University was **Arch E. Spelman**, M.D., Smithville, who spoke on "Rural Medicine in Missouri."

On November 6, **G. Wilse Robinson, Jr.**, M.D., Kansas City, attended the annual meeting of the Guild of Catholic Psychiatrists in New York.

The Missouri Association of Licensed Nursing Homes had **Edward H. Hashinger**, M.D., Kansas City, as a guest speaker at their annual meeting in Kansas City on October 29.

The Clay County health department elected **Eugene Robichaux**, M.D., Excelsior Springs, as secretary on November 2.

Speaking at a Conservation Clinic for Franklin County Teachers at Union on October 29, **James L. Mayfield**, M.D., Washington, advocated the formation of a Franklin County Mental Health Clinic.

L. Paul Forgrave, M.D., and **John R. Forgrave**, M.D., St. Joseph, were recently joined by H. Sheffield Jeck, M.D., formerly of Torrington, Conn.

"Medical Aspects of Civil Defense" was the subject of a talk given by **Carroll P. Hungate**, M.D., Kansas City, at a meeting of the Tulsa (Oklahoma) County Medical Society in Tulsa on November 29.

Morris Fishbein, M.D., Chicago, was a speaker before a noon luncheon of the Chamber of Commerce of Kansas City and at a public meeting of the Jackson County Health Forum in the evening on November 17.

Among speakers at a refresher course of the American Cancer Society recently in New York was **Terry E. Lilly, Jr.**, M.D., Kansas City.

For the third consecutive year, the St. Louis Heart Association recently elected **Arthur E. Strauss**, M.D., St. Louis, as president.

Active solicitation in the advance gifts division of the Gentry County Memorial hospital building fund began with a meeting at Albany on October 18.

Newly elected officers of the St. Louis Urological Society are **Stephen M. Tapper,** M.D., president; **Justin Cordonnier,** M.D., president-elect, and **John F. Mackey, Jr.,** M.D., secretary-treasurer.

The Mississippi Valley Medical Society, at a meeting on November 21, elected **Joseph C. Edwards,** M.D., St. Louis, vice president.

Will R. Eubank, M.D., Kansas City, was recently elected to the board of trustees of the Baptist Memorial Hospital which is in process of construction.

The Knight Templar 40 Year Award was presented to **T. W. Cotton,** M.D., Van Buren, at a district meeting in Mountain Grove early in October. It was presented for his civic and Masonic accomplishments.

James W. Willoughby, M.D., formerly of Liberty, is taking an indoctrination course for medical officers at Brooke Army Medical Center, Fort Sam Houston, San Antonio, Texas.

The laboratory at the Children's Convalescent Center, Kansas City, was dedicated October 24, in honor of the memory of Irene Cutter Keeling, M.D.

A check for $500 to be used for hospital improvements was presented to the Boone County Hospital on October 22 by the War Mothers.

Clinics planned to be held quarterly at the Cerebral Palsy School-Clinic of Atlanta, Georgia, will be conducted by **Robert E. Bruner,** M.D., Kansas City, who conducted the first clinic this fall.

New medical director of the Rehabilitation Institute, Kansas City, is Edward Shires, M.D., formerly of Schenectady, N. Y.

The Monett city council recently appointed **Frank Kerr,** M.D., as city physician.

The Doctors Medical Foundation, St. Louis, recently elected **John L. Horner,** M.D., St. Louis, president, and **Augustin Jones,** M.D., vice president.

Entering active duty as a Major with the U. S. Air Force Medical units recently was **Martin M. Hart,** M.D., Salem.

Approximately 250 persons attended a reception on October 24 honoring **R. J. Jennings,** M.D., Windsor, for fifty years of service in Windsor and vicinity as a physician and also for services in the Christian Church, where the reception was held.

The Frank H. Lahey Memorial Award for "outstanding leadership in medical education" was presented to President Eisenhower on November 16. The National Fund for Medical Education, the Association of American Medical Colleges and the American Medical Association sponsored the award in memory of Dr. Lahey and was presented to President Eisenhower as one of the founders of the National Fund for Medical Education.

Named director of the newly established department of anesthesiology at Jewish Hospital, St. Louis, is Nils Norman, M.D., formerly of Harvard University Medical School.

The Missouri Division, American Cancer Society reelected **George A. Carroll,** M.D., St. Louis, for a second term as president at an annual meeting on October 10 and 11.

The Gold Medal of the American College of Radiology will be awarded to **Ira H. Lockwood,** M.D., Kansas City, at the annual meeting of the College in Chicago on February 11, it has been announced. Only twelve other persons have received the medal.

Arnold S. Jackson, M.D., Madison, Wis., was a guest speaker at a meeting of the St. Louis Academy of General Practice on November 23.

Taking part in a television presentation, "The Empty Chair," as a part of a dinner meeting on November 22 of the advisory board of St. Vincent's Hospital, St. Louis, were **William C. Lytton,** M.D., and **Alphonse McMahon,** M.D., St. Louis.

The United Cerebral Palsy Association of Greater St. Louis had as speaker at its first annual meeting on November 23, **David E. Smith**, M.D., St. Louis. His subject was "The Whys of Cerebral Palsy."

Mr. Harry M. Piper has been appointed administrator of St. Luke's Hospital, St. Louis.

Graduating from the Ninth Interagency Institute for Federal Hospital Administrators at Walter Reed Army Medical Center on November 19 were John B. McHugh, M.D., Veterans Administration Hospital, Kansas City, and Ernest M. Tapp, M.D., Veterans Administration Hospital, Poplar Bluff.

The Early Childhood Division of the Horace Mann Laboratory School, St. Joseph, heard **H. E. Petersen**, M.D., St. Joseph, speak on "Mental Health in Children" at a meeting on November 18.

The Lick Creek Lodge No. 302, A. F. & A. M., honored **John E. Brown**, M.D., Perry, who has been a Master Mason since 1898, at a meeting recently.

"Children's Diseases," was discussed by **William H. Jolly**, M.D., Mexico, before members of the Lawder Parent-Teachers Association on November 12.

"Management of Emergencies in Gas-Oxygen-Ether Anesthesia," was the subject of a paper presented by **Russell D. Shelden**, M.D., Kansas City, at a postgraduate seminar held by the Missouri Society of Anesthesia at Cape Girardeau, November 21.

Green Chapel of the Audrain County Hospital was dedicated at an afternoon ceremony on November 14.

Among recipients of the William Jewell College Citation for Achievement on November 11 at Liberty was **W. Wallace Greene**, M.D., Kansas City.

Presentation of a citation by the National Association for Mental Health to Smith, Kline and French Laboratories and the American Medical Association for the television broadcast "Search for Sanity" was made December 7 at Philadelphia.

"How the General Practitioner Handles the Handicapped Child," was discussed by **E. Royse Bohrer**, M.D., Jefferson City, in a panel discussion on handicapped children held by the West Central Division of the Missouri Association on Social Welfare at California on December 2.

Recently opening an office in Mountain Grove is B. J. Roberts, M.D., a graduate of the University of Kansas Medical School.

"Understanding the Emotional Problems of Teen-Agers" was discussed by **Louis H. Forman**, M.D., Kansas City, before the Shawnee-Mission P.T.A. meeting on November 8.

The University of Missouri School of Medicine has announced the appointment of William T. Ellis, M.D., Boston, as assistant professor of obstetrics and gynecology.

Employees of State Hospital No. 1, Fulton, presented **W. J. Cremer**, M.D., retiring superintendent, with gifts in his office on October 1.

NEW MEMBERS

Ahern, Archibald M., M.D., St. Louis
Arroyo, Alfonso S., M.D., Independence
Bealock, Jane F., M.D., St. Louis
Birenbaum, Aaron, M.D., St. Louis
Burkhardt, Edward F., M.D., St. Louis
Carlin, M. Richard, M.D., St. Louis
Christ, Martin H., M.D., St. Joseph
Culkin, Thomas R., M.D., St. Louis
Daughaday, William H., M.D., St. Louis
DeGenova, G. H., M.D., Ste. Genevieve
Fairchild, James F., M.D., Perryville
Ferguson, Thomas B., M.D., St. Louis
Fleming, Robert J., M.D., Clayton
Gieselman, Ralph V., M.D., St. Louis
Gundle, Sigmund, M.D., Kansas City
Harrington, William J., M.D., St. Louis
Hetlage, Louis P., M.D., St. Louis
Heusler, Anton F., M.D., St. Louis
Hickman, Eugene A., M.D., St. Louis
Holbrook, Charles K., M.D., St. Louis
Kamakas, Nicholas, M.D., St. Louis
Magee, Robert L., M.D., El Dorado Springs
Mailman, Gershom, M.D., St. Louis
Motherhead, John L., M.D., St. Joseph
O'Keefe, Joseph D., M.D., St. Louis
Parkhill, Urie A., M.D., St. Louis
Pfaff, John, Jr., M.D., St. Louis
Porter, William J., M.D. Independence
Riley, John J., M.D., St. Louis
Roy, Joseph A., M.D., St. Louis
Schneider, Richard F., M.D., Kansas City
Sherman, Paul H., M.D., Kansas City
Smith, Hubert E., M.D., Kansas City
Smith, Sidney E., M.D., St. Louis
Smull, Ned W., M.D., Kansas City
Stanley, Charles G., M.D., Kansas City
Stansbrough, Raymond A., M.D., St. Louis
Starr, Phillip H., M.D., St. Louis
Stelmach, Walter J., M.D., Kansas City
Thomasson, Mary W., M.D., St. Louis
Thornton, Lowell F., M.D., St. Louis
Vest, James C., M.D., St. Louis
Wibbels, Howard L., M.D., St. Louis
Williams, Frank R., M.D., Kansas City

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Elixir, 25 mg. per 4-ml. teaspoonful
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C I B A

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ELI LILLY HOST TO ST. LOUIS PHYSICIANS

THE LILLY RESEARCH LABORATORIES

Eli Lilly and Company, Indianapolis, was host to 110 physicians and their wives from St. Louis Medical Society and St. Louis County Medical Society in Indianapolis on December 1, 2 and 3. While in Indianapolis, the group inspected the research laboratories and manufacturing plants of the company and were guests of Eli Lilly for dinners and entertainment during their stay. This is a courtesy Eli Lilly extends any medical society desiring to visit the laboratories.

DEATHS

Ginsberg, A. Morris, M.D., Kansas City, a graduate of the University of Pennsylvania, 1920; member of the Jackson County Medical Society; aged 59; died November 12.

Andrews, Raleigh K., M.D., St. Louis, a graduate of Washington University School of Medicine, 1916; member of the St. Louis Medical Society; aged 70; died November 17.

Nelson, William, M.D., St. Louis, a graduate of Washington University School of Medicine, 1901; member of St. Louis Medical Society; aged 75; died November 20.

Howard, John Clair, M.D., Kansas City, a graduate of the University of Arkansas School of Medicine, 1938; member of the Jackson County Medical Society; aged 44; died November 24.

Glenn, Joseph E., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1914; member of the St. Louis Medical Society; aged 66; died November 27.

NATIONAL FUND FOR MEDICAL EDUCATION APPOINTS ST. LOUIS CHAIRMAN

The National Fund for Medical Education announced today that Joseph Fistere, president of Mallinckrodt Chemical Works, will head the St. Louis Committee of American Industry as part of a nationwide drive to raise money for accredited medical schools.

Colby M. Chester of New York, national committee chairman, said the group, a division of the National Fund for Medical Education, is making a campaign for $10,000,000 annually to assist the medical schools.

In accepting the St. Louis chairmanship, Fistere said this country's 80 accredited institutions had been caught in an "economic pincers' movement," their expenses mounting while income declined.

"If industry and other private sources do not accept their responsibility for maintaining the nation's medical standards," he said, "the schools may be forced to depend on Government subsidies."

The National Fund for Medical Education was established in 1949 under leadership of a group which included President Dwight D. Eisenhower, then head of Columbia University. Nearly $5,000,000 in unrestricted grants has been distributed since that time.

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established by successful use for more than four years in the treatment of pneumonias and other respiratory tract infections due to susceptible organisms:

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"The response [of pneumococcal and mixed bacterial pneumonias in which pneumococcus, Staph. aureus hemolyticus, H. influenzae, E. coli and A. aerogenes were isolated from sputum or pharyngeal secretions] was excellent as manifested by improvement of clinical appearance and fall of temperature to normal" within 24 to 48 hours. "A remarkably high number of infants and young children tolerated this drug very well."[1]

antibiotics discovered by Pfizer

newest of the broad-spectrum antibiotics for the treatment of the pneumonias and other respiratory tract infections due to susceptible organisms:

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"The clinical results in . . . bacterial pneumonia were generally quite satisfactory" even though most of the patients were over 60 years of age. "Many had serious concomitant diseases such as severe chronic alcoholism, pulmonary emphysema" and other debilitating conditions. "Marked symptomatic improvement occurred in the first 2 or 3 days of therapy with decrease in cough and sputum volume and return of appetite and general sense of well-being."[2]

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1. O'Regan, C., and Schwarzer, S.: J. Pediat. 44:172 (Feb.) 1954.
2. Waddington, W. S.; Bergy, G. G.; Nielsen, R. L., and Kirby, W. M. M.: Am. J. M. Sc. 228:164 (Aug.) 1954.

Councilor District News

FIRST COUNCILOR DISTRICT

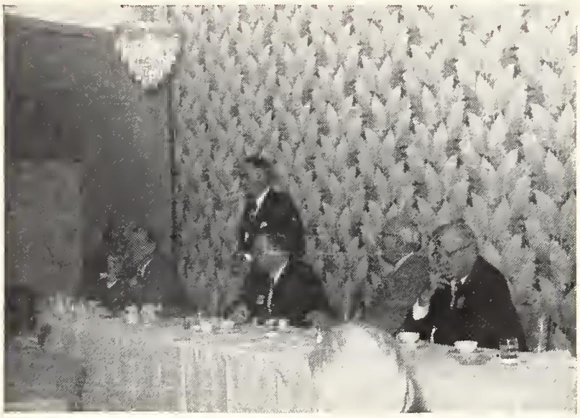
DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Clay County Medical Society

The Clay County Medical Society and its Woman's Auxiliary held a dinner meeting at Rugels Cafe in North Kansas City on Tuesday night, November 30. Forty-seven people were in attendance.

H. E. Petersen, M.D., St. Joseph, President of the State Association, registers for 100th Anniversary meeting of Clay County.

The scientific program for the evening was given by **William M. Kitchen**, M.D., Kansas City, who discussed, "Diagnosis of Gastro-Intestinal Tract Problems by X-Ray."



A panel presentation was part of the 100th Anniversary program.

A number of business matters were discussed by the society including proposed amendments to the by-laws. The society elected **Sidney O. Schroeder**, M.D., Liberty, as its President for 1955 and **S. R. McCracken**, M.D., Excelsior Springs, as its perennial Secretary-Treasurer.

S. R. McCracken, M.D., *Secretary*

A banquet highlighted the Anniversary meeting.

Informal discussions took place between sessions at the Anniversary meeting.

Grand River Medical Society

The Grand River Medical Society met November 18, at the Strand Hotel, Chillicothe. There were twenty-five members, sixteen auxiliary members, two drug representatives and a few visitors, making a total of about forty-five, present.

The program for the evening was presented by **Carroll P. Hungate**, M.D., Kansas City, Chairman, Committee on Emergency Medical Service, Missouri State Medical Association, who discussed the all important subject of "Civil Defense" and particularly as it applies to the State of Missouri. **H. M. Hardwick**, M.D., Jefferson City, who is head of the Civil Defense activities for the Missouri Division of Health, and **W. C. Allen**, M.D., Glasgow, joined in this discussion.

This being the night for the annual election the President, **John H. Platz**, M.D., called on **Joseph Conrad**, M.D., Chairman of the Election Committee. Dr. Conrad spoke of the progress the Society has made and recommended an advancement of officers as previously planned. He nominated **Watkins A. Broyles**, M.D., for President, **John R. Dixon**, M.D., First Vice President; **Frank R. Daley**, M.D., for Second Vice

President, and **E. A. Duffy,** M.D., for Secretary and Treasurer. The ballot was spread and all were elected by unanimous vote.

Minutes of the last meeting were read and approved.

E. A. Duffy, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

W. F. FRANCKA, HANNIBAL, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

On Thursday evening, November 11, members of the Chariton-Macon-Monroe-Randolph County Medical Society and guests were privileged to hear **Downey L. Harris,** M.D., St. Louis, an authority on rabies, discuss that subject. He spoke of his twenty-five years experience in the research development and manufacture of antirabies vaccine.

Twenty-one persons were in attendance.

Following the address of Dr. Harris the following officers were elected for 1955: President, Dr. **George M. Ragsdale**, Paris; Vice President, Dr. **C. C. Dohrs**, Moberly, and Secretary-Treasurer, Dr. **W. D. Chute**, Moberly.

After the regular meeting, Mr. Oliver Vehlewald, of Wyeth, Inc., showed a recent film on "The Management of Hypertension."

W. D. Chute, M.D., *Secretary*

Marion-Ralls-Shelby County Medical Society

A dinner meeting of the Marion-Ralls-Shelby County Medical Society with an invitation to all members of the Second Councilor District was held at the Mark Twain Hotel, Hannibal, Tuesday night, November 30.

The scientific program for the evening was given by **Grayson Carroll,** M.D., St. Louis. Dr. Carroll gave an interesting and practical discussion on "Drugs of Choice in the Management of Urinary Infections." This program was furnished in cooperation with the Missouri Academy of General Practice.

Francis R. Burns, M.D., *Secretary*

Pike County Medical Society

On Tuesday evening, November 16, the Pike County Medical Society went all out to honor one of its venerable members upon completion of fifty years in the practice of medicine. In October, 1904, Dr. **Charles Preston Lewellen**, now of Louisiana, began practicing medicine at Ashburn. Eight years later, in 1912, he moved to Louisiana and is still there, going strong. The testimonial dinner given for Dr. Lewellen on November 16, at the Country Club in Louisiana, was attended by approximately fifty people including members and wives of the Pike County Medical Society, a number of visiting physicians and their wives, and other friends and associates.

Dr. Lewellen posed with his sister and two sons.

Dr. Wilcoxen presided at the dinner.

Rev. David Coombs gave the Invocation and, as Chaplain of the Louisiana Elks Lodge, read a resolution of the lodge congratulating Dr. Lewellen upon his years of service and wishing him many more years of activity.

The dinner was well attended.

Charles G. Buffum, Jr., President of the Board of Trustees of the Pike County Hospital, on behalf of the Board of Trustees, presented Dr. Lewellen with an appropriate scroll expressing appreciation for his many years of service to the community.

Dr. **E. A. Cunningham**, Louisiana, who has been closely associated with Dr. Lewellen for the last twenty-five years, spoke glowingly of the values he had derived from the senior doctor's sound and stable judgment and friendly advice and help.

Dr. **W. A. Francka**, Councilor, Second District of the Missouri State Medical Association, expressed greetings, congratulations and best wishes from the Association.

In his response to all the bouquets given him, Dr. Lewellen expressed his deep appreciation and then described briefly medical advances during his years of practice.

Among those present on this occasion were three proud people, Dr. Lewellen's sister, Mrs. Maude Myers, a nurse at the Pike County Hospital; a son, Mr. John C. Lewellen, Louisiana, District Manager of Missouri Edison Company; and another son, Dr. **Charles H. Lewellen**, Louisiana.

Dr. **William B. Wilcoxen**, Bowling Green, President of the Pike County Medical Society served as Toastmaster.

J. H. HOOKER, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

OTTO W. KOCH, BRENTWOOD, COUNCILOR

Jefferson County Medical Society

The Jefferson County Medical Society met at the County Health Center, Hillsboro, on Friday night, December 10.

The scientific program for the evening was presented by **S. Heinemann**, M.D., St. Louis, who spoke on "Early Recognition and Care of Traumatic Urological Problems."

J. F. RUTLEDGE, M.D., *Secretary*

Lincoln-St. Charles County Medical Society

E. H. Burford, M.D., St. Louis, spoke at a dinner meeting of the Lincoln-St. Charles County Medical Society at the Southern Air, Wentzville, Thursday night, December 2. He spoke on "Common G-U Problems in General Practice and Their Treatment."

Seventeen physicians were present to hear this valuable discussion.

J. C. CREECH, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

J. LOREN WASHBURN, VERSAILLES, COUNCILOR

Postgraduate Course at Missouri University

On Thursday night, November 18, despite inclement weather conditions, fifty persons, including physicians and medical students, attended the second in a series of postgraduate evening meetings being given this fall and winter at the Missouri University Medical School. The six sessions are sponsored jointly by the Medical School and the Missouri Academy of General Practice.

The program for the evening was as follows: **Robert L. Jackson**, M.D., Professor of Pediatrics, University of Missouri, "The Diabetic Child." **Claude K. Leeper**, M.D., Associate Professor of Pathology, University of Missouri, "Cat Scratch Fever and the Newer Virus Diseases."

J. LOREN WASHBURN, M.D., *Councilor*

EIGHTH COUNCILOR DISTRICT

WALTER S. SEWELL, SPRINGFIELD, COUNCILOR

Ozarks County Medical Society

On Tuesday night, November 16, the Ozarks Medical Society and its ladies held a dinner meeting at the Bank Hotel, Aurora. Following dinner, the ladies were excused while some twenty society members enjoyed an interesting scientific program furnished by the Missouri Academy of General Practice in cooperation with the Medical School of the University of Missouri, as follows: **Clarence D. Davis**, M.D., Professor of Obstetrics and Gynecology, University of Missouri, "Management of the More Common Obstetrical Complications in G.P." **Robert L. Jackson**, M.D., Professor of Pediatrics, University of Missouri, "Feeding the Newborn Infant."

C. A. SPEARS, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society

On Thursday night, November 18, the Phelps-Crawford-Dent-Pulaski-Maries County Medical Society and its ladies met for a dinner meeting at Waukeeka Village, Salem. There were visiting doctors and wives present from the South Central County Medical Society and from Laclede County Medical Society. It was also nice to have **Otto W. Koch**, M.D., Brentwood, Councilor of the Fourth District of the Missouri State Medical Association, present.

The program for the evening was furnished by the Missouri Academy of General Practice in cooperation with the Medical School of the University of Missouri: "Blood Transfusions and Blood Reactions," by **Eugene T. Standley**, M.D., Columbia; "Common Urinary Problems in Children," by **James C. Cope**, M.D., Columbia.

The matter of hyphenation of the five-county society and the Laclede County Medical Society was discussed briefly, following which a joint committee of the two societies was appointed to work out necessary details toward such hyphenation.

Thirty-five persons were in attendance.

M. K. UNDERWOOD, M.D., *Secretary*

South Central Counties Medical Society

The South Central Counties Medical Society met for dinner Wednesday night, November 24, at Fredericks Cafe, one mile west of Cabool, with the following members and visitors present: Drs. **R. W. Denny**, **A. C. Ames** and **B. J. Roberts**, Mountain Grove; **Garrett Hogg, Jr.**, Cabool; **T. J. Burns** and **J. B. Kelley**, Houston; **M. B. Perkins** and **Paul A. Davis**, Willow Springs, and his technician; **C. F. Callihan** and **J. N. Wiles**, West Plains; **C. W. Cooper**, Thayer, and Dr. Robbins, Chicago, and a technician from Sharp & Dohme, and the wives of several of the members.

After dinner the ladies went home with Mrs. Hogg for the evening and the men went to the office of Dr. Hogg for the program. The meeting was called to order by Dr. Perkins, the President, and Dr. Cooper reported an interesting case in his practice which caused considerable difficulty in diagnosis. It was a tumor in the upper left abdomen which ultimately proved to be a hydronephroma with few symptoms exhibited.

Sharp & Dohme's technician then showed two films illustrating the "Intra-Articular Injection of Hydrocortisone for Rheumatoid Arthritis" and the results, which were favorable.

NOT ARTHRITIS BUT ARTHRALGIA...

If the patient complaining of aching joints is a woman between 37 and 54 years of age, it is highly possible that she is suffering from arthralgia rather than arthritis.[1] It has been estimated that arthralgia occurs in about 40 per cent of women with estrogen deficiency, and is exceeded in frequency only by symptoms of emotional or vasomotor origin.[2] In fact, arthralgia may be as indicative of declining ovarian function as the classic menopausal hot flushes.

Arthralgia, however, is just one of a vast number of distressing but ill-defined symptoms that may be precipitated by the loss of estrogen as a "metabolic regulator." Other good examples are insomnia, headache, easy fatigability, and tachypnea.

Because these symptoms sometimes occur years before or even long after cessation of menstruation, they are not always readily associated with estrogen deficiency, and the tendency may be to treat them with medications other than estrogen. Obviously, sedatives and other palliatives cannot be expected to produce a satisfactory response if an estrogen deficiency exists. Only estrogen replacement therapy will correct the basic cause of the disorder.

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1. Greenblatt, R. B., and Kupperman, H. S.: M. Clin. North America *30*:576 (May) 1946. 2. McGavack, T. H., in Goldzieher, M. A., and Goldzieher, J. W.: Endocrine Treatment in General Practice, New York, Springer Publishing Company, Inc., 1953, p. 225.

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The minutes of the last meeting were read and approved and then a financial statement presented. The meeting adjourned to meet in Willow Springs, December 29.

A. C. Ames, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Butler-Wayne-Ripley County Medical Society

A joint dinner meeting of the Butler-Wayne-Ripley and Dunklin County Medical Societies was held at the V.A. Hospital, Poplar Bluff, Tuesday night, November 23.

The program for the evening was sponsored by the Missouri Academy of General Practice and the St. Louis University Medical School as follows: Panel Discussion, "Recent Advances in the Treatment of Rheumatic Fever," by **John W. Berry**, M.D., **John J. Inkley**, M.D., and **James P. King**, M.D., St. Louis.

Twenty-three doctors were present to hear and participate in this discussion.

S. L. Gernstetter, M.D., *Secretary*

SEMO County Medical Society

A dinner of the SEMO County Medical Society and its ladies was held at the Rustic Rock Inn, Sikeston, Wednesday evening, November 17. A number of doctors and wives from Cape Girardeau were among the forty persons in attendance.

Forty attended the dinner preceding the meeting.

Wives were guests at the dinner.

Following a social hour and dinner, the ladies held a separate meeting where they were privileged to have Mrs. Charles T. Shepard, Clayton, First Vice-President of the Woman's Auxiliary to the Missouri State Medical Association, talk to them about organizing a local Auxiliary. Mrs. Shepard presented the case well enough that plans were made for another meeting shortly after January 1, with the idea in mind of formally organizing an Auxiliary to the SEMO County Medical Society.

The evening program for the doctors was a panel discussion on "Recent Advances in the Treatment of Rheumatic Fever," by Drs. **Robert Potashnick, John B. Meyers** and **James L. Donahoe**, St. Louis. The program was sponsored jointly by the St. Louis University Medical School and the Missouri Academy of General Practice.

W. C. Critchlow, M.D., *Secretary*

THE COUNCIL

The Council met at the Sheraton Hotel, St. Louis, November 6, 7, 1954, with W. S. Sewell, M.D., Springfield, Chairman, presiding. Present were Drs. Sewell; W. F. Francka, Hannibal; R. O. Muether, St. Louis; Otto W. Koch, Clayton; J. L. Washburn, Versailles; C. G. Stauffacher, Sedalia; Richard H. Kiene, Kansas City; J. H. Summers, Lebanon; Ben M. Bull, Ironton; H. E. Petersen, St. Joseph; Carl F. Vohs, St. Louis; Victor B. Buhler, Kansas City; E. R. Bohrer, Jefferson City; A. S. Bristow, Princeton; Henry Allen, St. Louis; Harry Klein, Duff S. Allen and Mr. John A. Hailey, of the State Board of Medical Examiners; Jasper Smith, Springfield; Lemoine Skinner, St. Louis; John Buckner, Springfield; Ray McIntyre and T. R. O'Brien, St. Louis.

PATHOLOGY AS PRACTICE OF MEDICINE

It was reported that the letter to Dr. Lull, instructed to be written at the last Council meeting concerning the Iowa Hospital Association contending that all pathology is not the practice of medicine, and a letter in reply stating that it would be referred to the proper Council of the A.M.A.

PHYSIOTHERAPY ADVISOR

Mr. O'Brien reported that the Physiotherapy Society again invited him to serve on its Advisory Committee and that he accepted the invitation.

A.M.A. SESSION

Dr. Bristow reported briefly on the San Francisco A.M.A. session saying that it was a session with no positive actions taken.

PROPOSED LICENSURE BILL

Dr. Sewell announced that a committee from the Board of Medical Examiners had been invited to meet with the Council for the purpose of studying the proposed licensure bill. The draft of the bill as of this date was gone over and discussed, several changes being agreed upon with one section dealing with the board and especially reciprocity being referred to the attorneys and the members of the Board for further

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study and rewriting. Changes in the present draft of the bill were made upon motions duly voted upon and will be reflected in revised copies of the draft.

DOCTOR DRAFT

Dr. Allen said there was some indication that extension of the Doctor Draft Act would be asked. He pointed out that local committees must coordinate with the state and that local committee recommendations were not always followed because of this.

CARDIAC COMMITTEE

Report of the Committee on Study of Cardiac Diseases was presented, the principal points being, the correlation of programs through the Association office was stressed; the grant making possible programs through St. Louis University; attention called to meeting of the Association in Camdenton; approval of the program "Heart in the Home" in which heart patients referred by physicians are instructed in home activities; the value of the "Heart Bulletin" on which there will be a survey. On motion of Dr. Buhler, seconded by Dr. Petersen, the report was approved.

CONSERVATION OF EYESIGHT

Report of the Committee on Conservation of Eyesight was presented which stressed the importance of screen tests for vision of school children and proposed invitation that the National Society for the Prevention of Blindness conduct a state wide testing; that "based on a study made in St. Louis, work by the National Society for the Prevention of Blindness and personal experience of ophthalmologists in the state, all of which pointed up inaccuracies in sight screening by commercial apparatus, the Committee recommends that commercial apparatus not be used and that the Snellen eye chart is the preferable method of sight screening."

The Committee further recommended "that based on studies by the Association in 1952 of the incidence of trachoma in the state, surveys by Drs. Brailey and Thygeson, an epidemiological study made by Dr. Cady of the USPHS and other independent reports by ophthalmologists in Missouri which indicated that the eye disease, trachoma, as a potential cause of preventable blindness is no longer a public health problem in Missouri, new cases being exceedingly rare and modern therapeutic measures having reduced the problem to one of minor importance, the Committee recommends that the Division of Health set a definite date in the near future when the Trachoma Hospital at Rolla will no longer accept patients for hospital care; that the outpatient clinic be continued for approximately one year after the closing of the hospital, and that the field clinics of the Trachoma Hospital staff be discontinued effective June 1, 1955; that the legislature of Missouri be advised and that appropriations of the General Assembly for the biennium, 1955-1957, reflect this recommendation. On motion of Dr. Buhler, duly seconded, the report was accepted with the instruction that the information be made available to the State Health Commissioner.

TREASURER'S REPORT

Dr. Vohs reported on the present balances of the Association and the outlook for the year, saying that probably there would be a small excess of income over expenses.

BUDGET

Dr. Vohs, chairman of the Budget Committee, presented the following budget for 1955:

Budget for 1955

Salaries	$ 40,500.00
Journal Expense	28,500.00
Postage, Printing & Stationery	5,000.00
Travel: Executive Secretary	1,300.00
Travel: Field Secretary	2,800.00
Telephone & Telegraph	1,600.00
Office Rent & Light	3,000.00
Meetings, Committee Expenses	20,800.00
Defense	500.00
Scientific & Postgraduate Work	1,000.00
Woman's Auxiliary	1,200.00
Public Relations	7,500.00
Insurance Annuity	2,780.00
Miscellaneous General Expense	2,500.00
Furniture & Fixtures	1,000.00
Social Security Tax	500.00
Legal Expense	2,000.00
	$122,480.00

DEFICIT BUDGET

It was pointed out that it was a deficit budget and that thought should be given to presenting this fact to the House of Delegates at the 1955 Session.

A.M.A. DELEGATES

At the suggestion of the Budget Committee, it was moved, seconded and voted that the Council recommend to the House of Delegates that after January 1, 1956, the expenses of alternate delegates to the A.M.A. not be paid unless they were serving in the place of a delegate; that the actual expenses of delegates be paid. This action is necessary because of the fact that the A.M.A. now meets twice yearly in far removed sections of the country and the actual expenses are much greater than in former years.

INDIGENT CARE SURVEY

It was moved, seconded and voted that $500 be given the Missouri Health Council to aid in completing the State Indigent Care Survey.

COUNCILOR LETTERS

The Councilor letters were discussed and on vote, it was decided that these be discontinued.

INSURANCE REVIEW

It was suggested that the retirement insurance program for employees needed study and on motion it was voted that a committee be appointed to conduct this study. The Chairman appointed the members of the Budget Committee as this committee.

FIELD SECRETARY'S REPORT

Mr. McIntyre reviewed meetings that had been held since the last Council meeting, reviewed meetings and

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1. Heller, E. M.: The Treatment of Essential Hypertension. *Canad. Med. Assn. Jour.*, 61:293, Sept., 1949.

programs that will be held during the remainder of November and December and told of study of locations for physicians. He told of one town which has offered to build both home and clinic for a physician who would locate there.

LICENSURE ACT

The final draft of the new licensure bill, including the phase on reciprocity delayed for further consideration earlier in the day with the members of the Board of Medical Examiners, was presented, and on motion, duly seconded, was passed unanimously.

PUBLIC POLICY AND PUBLIC RELATIONS REPORT

The following from the report of the Committee on Public Policy and Public Relations was presented: The Committee recommends to the Council, with possible change in timing, that during the month of November preparatory statements and copies of the bill be disseminated to members of the Committee on Public Policy and Public Relations, who in conjunction with Councilors, contact county societies and discuss principles; that about the 1st of December the bill with explanation appear in the Journal and that the Osteopathic Association be given a copy of the bill with all information. It was suggested that a Secretary's Letter go to all members giving information on the bill and that this letter also go to all osteopaths in the state.

ACTION

A special committee was appointed to consider the report of the Committee on Public Policy and Public Relations because of differing views on the timing as outlined in the report of the Committee. The Committee was unable to agree and so reported to the Council. On vote, it was passed with minority dissenting votes, that the outline presented in the report of the Committee on Public Policy and Public Relations be followed.

BLUE CROSS AND BLUE SHIELD

The dissatisfaction of two county medical societies on the action of the Council concerning Blue Cross was discussed. It was reported that those societies may have special meetings in the near future to discuss present Blue Cross-Blue Shield policies.

ALCOHOLISM

A preliminary report of the Committee on Alcoholism was presented with the information that the Council would be asked to assist in legislation for a Commission on Alcoholism at a later time; that the Committee was conferring with the Committee on Mental Health.

MEDICAL SECRETARIES

The recommendation of the Committee on Public Policy and Public Relations that the Missouri State Medical Secretaries and Assistants be requested to change the name to Medical Secretaries and Assistants of Missouri because of confusion of the present name with Missouri State Medical Association and Missouri Medical Service, and that the organization be approved, on vote was approved.

W. S. Sewell, M.D., *Chairman*

Editorial

(Continued from page 47)

the future increasing demands and seek out intelligent ways of meeting these demands—avoiding unnecessary duplication because we cannot afford duplication of effort if we are to encompass more service. Likewise, demands must be gauged and classified as to importance. We can take much heat off the hospitals by restricting hospitalization so that the hospitals are not importuned to admit patients who would fare just as well as outpatients. This would also make for less expensive hospital insurance. Likewise, shortening the preoperative and postoperative hospital periods, and also hospital period of care of medical cases—when this is compatible with good care—would make it possible for our institutions to give "wider" hospital care, particularly to those most needing hospitalization. And again this policy would also tend to lower hospital insurance rates.

Things have gone ahead rapidly and expanded so fast that, in order to cut out unnecessary waste and expense and in order to make the benefits of hospitalization go further and reach those most needing them we need to revise all our hospital and health insurance plans so as to integrate and include outpatient care and diagnostic procedure and at the same time to emphasize and make secure the necessary and essential honesty and sincerity of both patient and doctor in such an enterprise.

F. T. H'Doubler

Back to Fundamentals

If this state is to have a modern mental hospital program certainly it must be headed by a trained man who believes in it. This basic requirement explains the controversy over the reappointment of B. E. Ragland as director of the division of mental diseases.

. . . When he was appointed to the office by Governor Smith his chief interest appeared to be his function as patronage dispenser and related politics. He showed no dissatisfaction with the nineteenth century asylum idea. It is the old idea that there is little that can be done for mental patients except lock them up.

Even when the hospitals gained some support from the last Legislature Ragland resisted. The state merit board approved competitive salaries for psychiatrists and Ragland refused to go along. . . . Since the Senate could block the Ragland reappointment the (Albert M.) Spradling committee is the logical one to consider the case.—Editorial, *Kansas City Star.*

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	Vestibular damage % of patients		
	Mild	*Moderate*	*Total*
Streptomycin	12	6	18
Dihydrostreptomycin	6	0	6
Distrycin	0	0	0
	Cochlear damage % of patients		
	Mild	*Moderate*	*Total*
Streptomycin	0	0	0
Dihydrostreptomycin	12	3	15
Distrycin	0	0	0

**Heck, W.E.; Lynch, W.J., and Graves, H.L.: Acta oto-laryng. 43:416, 1953.*

Distrycin dosage is the same as for streptomycin. In tuberculosis the routine dose is 1 Gm. twice weekly, in conjunction with daily para-aminosalicylic acid or Nydrazid (isoniazid). In the more serious forms of tuberculosis, Distrycin may be given daily, at least until the infection has been brought under control.

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News From the Medical Schools

WASHINGTON UNIVERSITY

Research: A hitherto unknown type of abnormal pigment in human blood (Hemoglobin E) was detected by Dr. Amoz I. Chernoff, assistant professor of medicine; Miss Virginia Minnich, research associate in medicine; and Dr. Soodsakorn Chongcharoensook and Dr. Supa NaNakorn, both of the faculty of medicine at Siriraj Hospital, University of Medical Sciences, Bangkok, Thailand. Dr. Chernoff reported on Hemoglobin E September 13 at the International Society of Blood Transfusions which met in conjunction with the Fifth Congress of the International Society of Hematology in Paris September 12-19.

Honored: Dr. Edmund V. Cowdry, research professor emeritus and lecturer in anatomy and director of the Wernse Laboratory of Cancer Research, was honored for his almost forty years of scientific activity and contributions to anatomy, cytology, cancer research and gerontology at a dinner given by the Detroit Institute of Cancer Research, Wayne University, on October 26. Many of Dr. Cowdry's former students, co-workers, and friends attended. While in Detroit, Dr. Cowdry attended the annual meeting of the Detroit Cancer Research Institute and gave an evening lecture on "Unexplained Differences in Cancer Frequency in Various Parts of the World." Recently Dr. Cowdry accepted the chairmanship of the National Scientific Council of the City of Hope Medical Center, Duarte, Calif. The first meeting of the Council was held December 5-9, 1954. One of the Council's members, Dr. Nathan A. Womack, is a former associate professor of surgery at Washington University School of Medicine and now is professor of surgery and head of the department at the University of North Carolina School of Medicine.

Lectures and Meetings: Three faculty members of the Department of Medicine participated in the Twenty-Seventh Annual Meeting of the Central Society for Clinical Research October 29-30 in Chicago. A paper, "Tissue Binding of Hydrocortisone," by Dr. Marvin E. Levine, National Foundation for Infantile Paralysis Fellow in Medicine, and Dr. William H. Daughaday, assistant professor of medicine, was presented by Dr. Daughaday. "Clinical, Hematological, and Genetic Studies of Hemoglobin E," a paper prepared by Dr. Amoz I. Chernoff, assistant professor of medicine, and Miss Virginia Minnich, Dr. Soodsakorn Chongcharoensook, Dr. Supa NaNakorn and Mrs. Renate Chernoff, was presented by Dr. Chernoff. Dr. Lillian Recant, assistant professor of medicine and of preventive medicine, reported on "A Defect in Ketone Metabolism in Cirrhosis of the Liver." Many other members of the Medical School staff also attended the meeting.

The Mid-West Orthopedic Club, a group of young practicing orthopedists from the Mid-West area, met in St. Louis October 29-30. Lee T. Ford, instructor in clinical orthopedic surgery, and Maurice B. Roche, of St. Louis University School of Medicine, were hosts to the twenty-five members. Staff members of the School of Medicine presented eight papers and cases concerning orthopedic surgery.

Four members of the Child Guidance Clinic participated in the program at a regional meeting of the American Association of Psychiatric Clinics for Children at the Menninger Foundation in Topeka, Kan., October 29-30. The subject of the meeting was "Diagnostic Aspects of Schizophrenia in Childhood." Participating members from the School of Medicine were Dr. Phillip H. Starr, assistant professor of psychiatry and of pediatrics and director of the Child Guidance Clinic; Dr. Loretta Cass, assistant professor of medical psychology; Miss Mary Schulte, instructor in psychiatric social work; and Miss Helen Verdeyen, psychiatric social worker.

Dr. Lauren Ackerman, professor of pathology and of surgical pathology, was the invited guest at the monthly meeting of the Academy of Medicine at Toronto November 2. He spoke on "Pathological Diagnosis of Bone Tumor Correlated With Clinical Behavior." On November 4, Dr. Ackerman participated in the Eighth A. Walter Suiter Memorial Lecture at the New York Academy of Medicine in New York City. The Lecture was a symposium on "Cancer, What We Know Today," and Dr. Ackerman's subject was "The Natural History and Early Diagnosis of Cancer." He also spoke November 6 to the staff of Delafield Hospital, the cancer hospital for Columbia University. His subject was "Cancer of the Breast: An Evaluation of Dr. (Robert) McWhirter's Method of Treatment Based on a Personal Study of His Cases."

Dr. Edward H. Reinhard, associate professor of medicine and of radiology, gave the Third Annual Lewis Harvie Taylor Lecture at the 55th Annual Meeting of the American Therapeutic Society held in St. Louis November 4-7. Dr. Reinhard spoke on "Therapy of the Leukemias and Lymphomas," on November 5.

Capping Ceremony: A candlelight capping ceremony for twenty-three students of the School of Nursing was held at 7:00 p.m., November 12, at Graham Memorial Chapel. Miss Louise Knapp, director of the School of Nursing, conferred the caps on student nurses who entered training in June 1954. She was assisted by Miss Ruby Potter, assistant director. A program of choral music and the repeating of the "Nightingale Pledge" were included in the ceremony.

Fellowships: Fellowship in the American College of Surgeons was conferred on four faculty members of the School of Medicine November 19 at the 40th Annual Clinical Congress of the American College of Surgeons which met in Atlantic City November 15-19. The four doctors honored were Harvey R. Butcher, Jr., instructor in surgery; Falls B. Hershey, instructor in surgery; C. Alan McAfee, assistant in clinical surgery, and Joseph C. Peden, Jr., assistant in clinical surgery. Drs. Butcher and Hershey presented papers at the Congress. Other participants for the Congress in Atlantic City from the School of Medicine were Willard M. Allen, professor of obstetrics and gynecology and head of the department; A. N. Arneson, professor of clinical obstetrics and gynecology and associate professor of clinical radiology; James Barrett Brown, professor of clinical surgery; Thomas H. Burford, professor of thoracic surgery; Charles Eckert, associate professor of surgery and director of the division of tumor services; Robert Elman, professor of clinical surgery; Lee T. Ford, instructor in clinical orthopedic surgery; Minot P. Fryer, assistant professor of clinical surgery; Evarts A. Graham, emeritus Bixby professor and lecturer in surgery; J. Albert Key, professor of clinical orthopedic surgery; J. Otto Lottes, instructor in clinical orthopedic surgery; Milton Lu, assistant in plastic surgery; A. D. Mason, assistant in surgery (on leave of absence for service in the armed forces); Frank McDowell, assistant professor of clinical surgery; Carl A. Moyer, Bixby professor of surgery and head of the department; C. Barber Mueller, assistant professor of surgery and assistant dean; Henry G. Schwartz, professor of neurosurgery; A. I. Sherman, assistant professor of obstetrics and gynecology and instructor in radiotherapy; William Sleator, Jr., assistant professor of biophysics in the department of physiology; and D. G. Stout, technical assistant in surgery.

Society Meeting: The Washington University Medical Society held its second meeting of the school year December 2 with three research papers presented by Melvin Cohn, assistant professor of microbiology; Martin Kamen, associate professor of radiochemistry; and Margaret G. Smith, associate professor of pathology, and W. G. Klingberg, associate professor of pediatrics. Officers were elected.

UNIVERSITY OF MISSOURI

Nobel Prize Winner in Medicine: Dr. Frederick Chapman Robbins, currently Professor of Pediatrics, Western Reserve University School of Medicine, Cleveland, Ohio, was one of three physicians winning the 1954 Nobel Prize in Medicine. Doctor Robbins graduated from the University of Missouri with the degree of Bachelor of Arts in 1936, and obtained a Bachelor of Science in Medicine from the University of Missouri School of Medicine in 1938, subsequently receiving his Doctor of Medicine degree from Harvard in 1940. Doctor Robbins' father was Dean of the Graduate School at the University of Missouri. Doctor Robbins is the first alumnus of the University of Missouri School of Medicine to become a Nobel Laureate.

Postgraduate Activities: Dr. Roscoe L. Pullen, Dean of the School of Medicine, served as Moderator of a panel discussion on "Our Government—Our Profession" at the Centennial Celebration of the Clay County Medical Society, Elms Hotel, Excelsior Springs, Missouri, on November 4. Members of the panel included Dr. Palmer Dearing, Deputy Surgeon General, United States Public Health Service, Washington, D. C.; Dr. Thomas Alphin, Assistant Director, Washington Office, American Medical Assn.; Dr. Paul Hawley, Director, American College of Surgeons, Chicago, Illinois, and Dr. John R. Fowler, President-Elect, American Academy of General Practice, Barre, Mass.

On November 3, the Faculty of the School of Medicine participated in an all day Health Program for the Farm Forum, sponsored by the College of Agriculture, held in Columbia on the campus of the University of Missouri. Dean Pullen spoke on "Changing Concepts of Medical Education and Medical Practice"; Dr. Robert L. Jackson, Professor of Pediatrics, spoke on "The Healthy Child"; Miss Dorothy L. Vorhies, Associate Professor of Dietetics, spoke on "Practical Nutrition Today," and Dr. Clarence D. Davis, Professor of Obstetrics and Gynecology, and Chairman of the Committee on Postgraduate Medical Education, served as Moderator of a panel discussion that followed. Mr. Arthur Nebel, Director of the School of Social Work, University of Missouri, discussed, "The Missouri State Crippled Children's Service."

Dr. Hugh E. Stephenson, Assistant Professor of Surgery, and a Markle Scholar in Medical Science, attended the meeting for Markle Scholars called by the John and Mary R. Markle Foundation at Spring Mill State Park, Indiana, October 20, 21 and 22. On October 25 through October 28 Doctor Stephenson attended the annual Convention of the American Society of Anesthesiologists in Cincinnati, Ohio, and at the request of the Scientific Exhibit Section presented an exhibit on cardiac arrest and resuscitation. On November 12, Doctor Stephenson went to New York City to give a Postgraduate course in "Cardiac Arrest and Resuscitation." On November 10 Doctor Stephenson spoke before the Southern Medical Association in St. Louis on "Sudden Failure of the Cardiac Conduction System."

On November 9, Dr. Robert L. Jackson, Professor of Pediatrics, addressed the Southern Medical Association in St. Louis on "The Management of the Diabetic Child." On the same day Dr. M. Pinson Neal, Professor of Pathology, addressed the Southern Medical Association on "The Diagnosis of Pernicious Anemia." Dean Roscoe L. Pullen of the School of Medicine attended opening sessions of the Southern Medical Association and sat at the speakers' table.

Miss Dorothy L. Vorhies, Associate Professor of Dietetics, attended the annual meeting of the American Dietetic Association held in Philadelphia from October 25 to October 30. She attended the conferences of the Directors of Approved Courses and Heads of College Home Economics Departments on October 23 and 24, also in Philadelphia.

Dr. William A. Sodeman, Professor of Medicine, addressed the Cosmopolitan Club of Columbia at its luncheon on October 28 on "Lengthening Your Life." He subsequently addressed the Resident Wives Club of the College of Agriculture on "How to Save Your Husband's Heart." Doctor Sodeman attended the American Society of Tropical Medicine meeting in Memphis on November 5-6, 1954, and gave a series of talks to the First Symposium Society of Graduate Internists in Los Angeles County Hospital, Los Angeles, California, on November 13 and 14.

Dr. John J. Modlin, Clinical Associate in Surgery, gave a series of talks on "Cancer" before the Oklahoma City Clinical Society during the latter part of October.

Dr. Hugh E. Stephenson, Jr., Assistant Professor of Surgery, attended the annual meeting of the American College of Surgeons in Atlantic City, N. J., from November 18 to November 20. On November 18 Doctor Stephenson presented a movie on "The Mechanism of the Production of Cardiac Arrest on an Experimental Basis," before the assembly, and was later initiated into full Fellowship in the American College of Surgeons.

Dr. M. Pinson Neal, Professor of Pathology, is Chairman of the Standing Committee on Medical Education and Hospitals of the Southern Medical Association.

On October 17, Dr. Roscoe L. Pullen, Dean of the School of Medicine, participated in a panel discussion on Graduate Medical Education before the Association of American Medical Colleges meeting in French Lick, Indiana. Dr. Joseph E. Flynn, Professor of Pathology, attended the meeting as Cancer Coordinator for the University of Missouri School of Medicine, and as representative of the University of Missouri to the Teaching Institute on Pathology, Immunology, Biochemistry and Microbiology.

Grants: The National Cancer Institute has renewed the Undergraduate Cancer Teaching Grant of $25,000 to the University of Missouri School of Medicine for the fiscal year beginning January 1, 1955, said grant to be administered by Dr. Joseph E. Flynn, Professor and Chairman of the Department of Pathology.

Resignations: Dr. Bohdan Jelinek, Associate Professor of Biochemistry, resigned on October 25, 1954. Dr. W. J. Cremer, Clinical Associate in Medicine, resigned as Superintendent of State Hospital No. 1 in Fulton, effective November 1, 1954.

ST. LOUIS UNIVERSITY SCHOOL OF MEDICINE

Dr. McMahon Honored: Dr. Alphonse McMahon, who presided over the 48th meeting of the Southern Medical Association held in St. Louis November 8 to 11, was honored with a reception given by the St. Louis University School of Medicine Alumni at Commerce and Finance Lounge, 3674 Lindell Boulevard, on November 9.

Dr. Alphonse McMahon, retiring president of the Southern Medical Association, is congratulated by Dean James W. Colbert, Jr., of St. Louis University School of Medicine, at a medical alumni reception held to honor Dr. McMahon during the S.M.A.'s 48th annual meeting held in St. Louis November 8-11. Left to right: Dr. Garold V. Stryker, director of the department of dermatology and alumni president; Dean Colbert; Dr. George F. Lull, Secretary and General Manager, American Medical Association; Dr. McMahon and Dr. R. L. Sanders, from Memphis, Tennessee, new president of the S.M.A. Dr. McMahon is associate professor of internal medicine at the School of Medicine and chief-of-staff at St. John's Hospital, St. Louis.

Some 300 alumni members, faculty representatives and hospital staff members from St. Mary's Group and St. John's gathered to honor the retiring president. On hand to extend their congratulations too were: The Very Rev. Paul C. Reinert, S.J., President of the University; Dean James W. Colbert, Jr., School of Medicine; and Rev. Alphonse M. Schwitalla, Dean Emeritus, School of Medicine.

Dr. McMahon delivered his presidential address at the opening assembly of the S.M.A. convention held in the Gold Room, Jefferson Hotel. In his address titled "The Doctor and the Public," Dr. McMahon urged physicians to take a more active part in the civic life of their communities. He said it was their duty to work for good government, religious growth and fund raising campaigns.

Following the opening assembly, the convention moved to Kiel Auditorium, where it met in twenty-one different scientific sessions and was attended by about 2,500 physicians from sixteen states and the District of Columbia.

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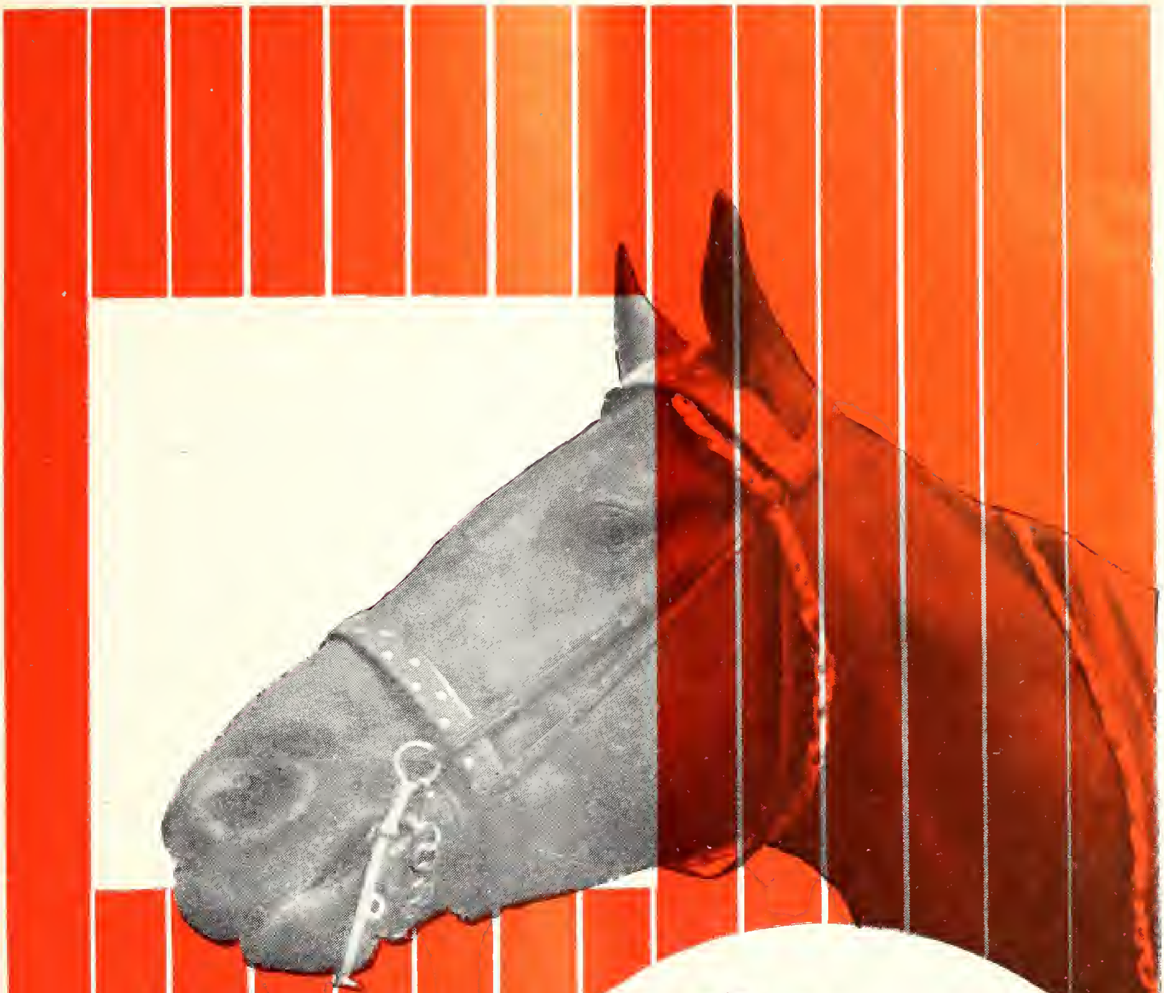

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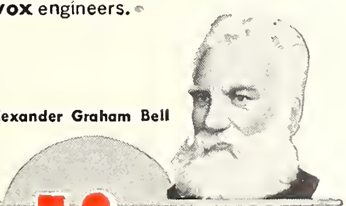

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Musings

(Continued from page 48)

tinguished guests, clever displays and the Auxiliary scrapbook and yearbook.

Dr. E. A. Belden, Director, Bureau of Tuberculosis Control, Missouri Division of Health, held a meeting of his advisory committee on T.B. Control at Jefferson City, Sunday, November 14. Physicians present who are members of the State Medical Association Committee on Tuberculosis were: Dr. Paul Murphy, St. Louis; Dr. I. J. Flance, St. Louis; Dr. E. E. Glenn, Springfield; Dr. C. A. Brasher, Mt. Vernon, and Dr. F. E. MacInnis, Kansas City. Dr. Walter Gray, St. Louis, represented the Missouri Academy of General Practice. Case finding through mass x-ray survey, routine hospital admission x-raying, tuberculin testing surveys and Missouri State Sanatorium problems were the major topics discussed. Dr. Gray discussed in some detail the tuberculin testing program in a number of schools in St. Louis County being carried on by the St. Louis Academy of General Practice with the cooperation of the Tuberculosis and Health Society of St. Louis.

In addition to the doctors named, a number of representatives from other organizations as the Missouri Tuberculosis Society and the V.A. were present.

William L. Watson, M.D., New York, was a guest speaker at the M.A.G.P. annual meeting in Jefferson City, October 27 and 28.

A dinner was held in connection with the M.A.G.P. meeting.

Dr. E. A. Belden presided at the T.B. advisory committee meeting.

The T.B. advisory committee meeting was well attended.

Medical Ethics

(Continued from page 43)

1. If you were in the position of the patient, including his economic situation, whom would you choose as a consultant in your case?
2. Would you, as a patient, be happy about a physician selling your illness to another physician?
3. If you had the same condition as the patient, would you agree to surgery?
4. Would you be happy if someone operated upon you other than the person you had selected to do the operation?

We can even brief these brief postulates of medical ethics. In the Gospel of Saint Matthew, Chapter VII, verse 12, we read: "Therefore all things whatsoever ye would that men should do to you, do ye even so to them: for this is the law and the prophets." It is also all there is to medical ethics.

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ANALYSIS OF THE LEGISLATIVE PROPOSAL FOR A SINGLE STANDARD FOR LICENSING PHYSICIANS AND SURGEONS

Introductory

Why does the State of Missouri require lawyers, accountants, architects and other professional people to have state license before they may offer their services to the public? The reason is to protect the public —to give assurance that persons providing services related to the private and public welfare are persons competent to perform such services.

These licensing laws of the state are of the greatest importance to all citizens. The State of Missouri, in effect, assures its citizens that they may go with confidence to professional people for service because these people have met the standards of competence set by the state.

Of all the professional licenses issued by the state for the protection of citizens, there is one kind that has the very greatest importance to every man, woman and child in Missouri. This is the kind of license the state gives to those it permits to diagnose and care for the sick.

If you retain a man who is not really a lawyer, it may cost you money. If you hire a man who is not really an accountant, your business affairs may get out of order. If you hire a man who is not really an architect, you may build a structure that collapses.

But if you are sick and you go to a man who is not really a physician, you may forfeit your health—or life itself.

That is why it is of the greatest importance to every citizen of the State of Missouri that our state government should have the best possible method for setting and maintaining the standard of competence it will demand before it will license a person to set himself up as a physician to care for the sick.

The proposed new law here described is sponsored by the Missouri State Medical Association to provide such a method. Its passage by the 1955 General Assembly will give the people of this state the protection they have the right to expect in a matter so vitally affecting their health and their lives.

Background of the Problem

There are at the present time in Missouri three separate and distinct state licensing boards each granting licenses permitting persons to care for the sick.

These are the State Board of Medical Examiners, responsible for the licensure of doctors of medicine and midwives; the State Board of Osteopathy, responsible for the licensure of doctors of osteopathy, and the State Board of Chiropractic, responsible for the licensure of chiropractors. Three different sets of laws define the sorts of practice these different groups of practitioners may engage in.

If the state has only one standard by which it judges whether or not a man is competent to be a lawyer or an architect, is it not just as important to have one standard for measuring the qualifications of those who are to be permitted to diagnose and care for sickness and treat all the ailments of the human body?

Fifty or more years ago, it was possible for rational men to have differing views about the nature of the science of medicine. In the then-existing state of scientific knowledge, theorists of various sorts could rationally hope to find cure-alls, panaceas and short-cuts to health.

In the past two generations, however, the progress of exact knowledge in the field of medical care has been enormous. Medicine has become a science as well as an art. Scientific techniques have conquered dread diseases like typhoid and diphtheria. Surgical methods have advanced until scores of conditions formerly fatal may now be surely and scientifically corrected. In the field of drugs astonishing progress has been made. The danger has been taken out of most childhood diseases. Childbirth itself has been made safe as could never have been dreamed by earlier generations.

Here are a few detailed facts taken from "Health Progress in the United States" published in 1952 by the Bookings Institution, Washington, D. C.

"Since the beginning of the century, the average length of life in the United States has increased from 49.2 years to 67.2 years in 1948."

"The actual death rate of children under one year of age declined from 162.4 per 1000 live births in 1900 to 31.3 in 1949."

"Control measures and proper treatment have relegated illnesses that were once major causes of death (e.g. pneumonia) to minor roles."

"There are many reasons for the general improvement shown by mortality figures. Chief among them, perhaps, are the tools and knowledge supplied to physicians by biological scientists. . . ."

The fact of the matter is abundantly clear. Medical science—based on the exact disciplines of the laboratory and precisely recorded clinical experience—has come of age. In the light of the evidence, is it possible to recognize any approach other than the scientific approach to the problems of health and sickness?

It surely follows that the State of Missouri ought to demand mastery of the techniques of medical science from all those it licenses to care for the sick. *There is just one standard good enough for the people of Missouri*—and that is the standard of scientific competence. It is this standard that the law now proposed will set up for all who henceforth seek to be licensed by the state to care for the sick.

What the Proposed New Law Provides

Outlined below are the major provisions of the proposed statute:

1. Existing laws relating to the present separate state boards of medical examiners, osteopathy and chiropractic and to these three categories of practitioners are repealed.

In their place are enacted the 22 new sections of the proposed act relating to the practice of the healing arts in the State of Missouri.

2. The act creates a board to be known as the State Board of Registration for the Healing Arts for the purpose of registering, licensing and supervising all practitioners of the healing arts in the State of Missouri.

The following professional groups, licensed by the state to provide specialized health services, are specifically exempted from the provisions of the proposed new law: dentists, nurses, optometrists, pharmacists and chiropodists.

3. On the effective date of the Act, all persons presently licensed by the state as practitioners of medicine and surgery and all persons licensed as osteopathic physicians shall have exactly the same practice rights and shall be automatically licensed by the state as physicians and surgeons.

The proposed statute gives recognition to the fact that accredited schools of medicine and accredited schools of osteopathy at the present time seek to prepare students in the fundamental disciplines of medical science. Both seek to bring students to a standard of competence acceptable in the light of today's knowledge and today's best practice.

4. On the effective date of the Act, all persons presently licensed as midwives shall continue to be licensed to practice midwifery.

5. On the effective date of the Act, all persons presently licensed as chiropractors shall continue to be so licensed and shall have the right to practice chiropractic.

6. The proposed law provides that *it shall be unlawful for any person not licensed and registered under the act as a physician and surgeon to treat the sick.* (As indicated above, presently licensed midwives will continue to be licensed to practice midwifery and presently licensed chiropractors will continue to be licensed to practice chiropractic.)

(To "treat the sick" is defined in the statute as "to examine into the fact, condition or cause of human health or disease, or to diagnose, treat, operate on, prescribe or advise for the same, or to undertake, offer, advertise, announce or hold out in any manner to do any of said acts.")

7. The proposed statute provides for the type of examination to be given to candidates applying for licenses. It provides further that—except for certain specific provisions for granting Missouri licenses to licensed practitioners from other states—"no license of any kind may be issued to any person by the board" until the applicant has passed both Part I and Part II of the specified board examination. Part I of the examination (which may be taken by candidates at the end of two years of professional schooling) will embrace the subjects of anatomy, histology, pathology, physiology, bacteriology or microbiology, biochemistry, physical diagnosis, sanitation and hygiene.

Part II of the examination, given after the candidate has completed his schooling, "shall embrace the subjects taught in reputable professional colleges" and be "sufficiently strict to test the qualifications of the candidate as a practitioner."

To be eligible to take the examination described above, candidates will have graduated from high school, have completed 60 semester hours of college before entering professional school, and have received a diploma from some reputable medical or osteopathic school approved by the board (or by the American Medical Association or by the American Osteopathic Association) that enforces requirements of four terms of 32 weeks of actual instruction in each term, including two years' experience in operative and hospital work at the time of graduation.

8. The proposed act provides rules for the recording of licenses with the county clerk, for biennial registration of licenses with the board, for the board's enforcement of a code of professional conduct and, in general, for the performance by the board of the duties customarily vested in such a body.

9. The membership of the proposed State Board of Registration for the Healing Arts is provided for as follows:

"The Board shall consist of seven members to be appointed by the Governor by and with the advice and consent of the Senate, five of whom shall be graduates of professional schools approved and accredited as reputable by the American Medical Association and two of whom shall be graduates of professional schools approved and accredited as reputable by the American Osteopathic Association. . . ."

(This five-and-two ratio approximates the ratio of the numbers of medical and osteopathic physicians actually practicing in the state.)

What the Proposed New Law Means to All Missourians

The proposed statute recognizes the historic rights of all practitioners affected. It gives to presently licensed osteopathic physicians and to presently licensed doctors of medicine absolutely equal status in their practice. Both are to be automatically licensed as physicians and surgeons.

It gives to presently licensed chiropractors and to presently licensed midwives the right to continue to practice their respective callings within the limits presently prescribed by law.

It gives to the people of Missouri assurance for the future that, when a new license is issued to a person who wishes to set up practice in this state, that person will have measured up to a necessary and minimum standard of training, knowledge and competence.

The passage of this law will mean—in the simplest terms—that, when in all the long generations ahead a Missouri family takes a sick child to a doctor, that doctor will be qualified—by the state's sure certification—to diagnose intelligently the nature of the sickness and to bring the full facilities of our modern community of scientific medicine into play for the treatment of that sickness.

The people of Missouri can be satisfied with nothing less. A doctor is either a doctor or he isn't. On this point the citizen has a right to have assurance from the government of his state.

Conclusion

You are invited to submit any questions you may have concerning this proposed new statute to the Missouri State Medical Association, 623 Missouri Theatre Building, 634 North Grand Boulevard, St. Louis 3, Missouri. The full text of the proposed law will be supplied upon request.

You are invited to join the common effort of informed citizens throughout the state on behalf of the proposed new legislation. It is one of the most important matters before the legislature. It affects you, your family and every resident of the state.

AN ACT

To repeal Sections 334.010 to 334.220, inclusive, RSMo, being all of Chapter 334, relating to practitioners of medicine, surgery and midwifery, and to repeal Sections 337.010 to 337.090, inclusive, RSMo, being all of Chapter 337, relating to practitioners of osteopathy, and to repeal Sections 331.010 to 331.100, inclusive, RSMo, being all of Chapter 331, relating to the practice of chiropractic, and to enact in lieu thereof twenty-two new sections relating to the practice of the healing arts in the State of Missouri, creating a state board of registration for the healing arts, providing for the licensing of all physicians and surgeons and the biennial registration of physicians and surgeons, chiropractors and midwives, and granting to said board of registration for the healing arts authority for supervision and regulation of the professions licensed and registered by it, with penalties for the violation of the Act.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF MISSOURI AS FOLLOWS:

Section A. Sections 334.010 to 334.220, inclusive, RSMo, being all of Chapter 334, relating to practitioners of medicine, surgery, and midwifery, and Sections 337.010 to 337.090, inclusive, RSMo, being all of Chapter 337, relating to practitioners of osteopathy, and Sections 331.010 to 331.100, inclusive, RSMo, being all of Chapter 331, relating to the practice of chiropractic, are hereby repealed, and there is hereby enacted in lieu thereof twenty-two new sections relating to the practice of the healing arts in the State of Missouri, said new sections to read as follows:

Section 1. Whenever used in this act, unless expressly stated otherwise:

(a) The term "board" means the State Board of Registration for the Healing Arts in the State of Missouri;

(b) The term "the healing arts" means the art or science or group of arts or sciences dealing with the diagnosis, prevention and cure or alleviation of human ailments, diseases or infirmities, physical or mental;

(c) To "treat the sick" is to examine into the fact, condition or cause of human health or disease, or to diagnose, treat, operate on, prescribe or advise for the same, or to undertake, offer, announce or hold out in any manner to do any of said acts.

(d) The term "practice of chiropractic" means the palpation and adjustment by hand of the movable articulations of the human spinal column for the correction of the cause of abnormalities or deformities of the body. It does not include the use of operative surgery, obstetrics, osteopathy, nor the administering, dispensing or prescribing of any drug or medicine.

Section 2. 1. There is hereby created and established a board to be known as "The State Board of Registration for the Healing Arts" for the purpose of registering, licensing and supervising all practitioners of the healing arts, including, but not limited to, all physicians and surgeons, chiropractors and midwives in this state. The Board shall consist of seven members to be appointed by the Governor by and with the advice and consent of the Senate, five of whom shall be graduates of professional schools approved and accredited as reputable by the American Medical Association and two of whom shall be graduates of professional schools approved and accredited as reputable by the American Osteopathic Association, and all of whom shall be duly licensed and registered as physicians and surgeons under the laws of this state. Each member must have been a resident of this state for a period of at least five consecutive years next preceding his appointment and shall have been engaged during said time in the lawful and ethical practice of the profession of physician and surgeon. Not more than four members shall be affiliated with the same political party. The first members of the board herein created shall be appointed as follows: two members for a term of two years; two members for a term of three years; and three members for a term of four years; and thereafter all members shall be appointed for a term of four years. Each member of the board shall receive $10.00 per day and his actual and necessary expenses for the time actually employed in the discharge of his duties.

2. The board shall elect its own president and secretary, each to serve for a term of one year, and shall maintain an office and employ an executive secretary and such other employees and professional personnel as the board may in its discretion deem necessary, who shall perform such duties as the board shall direct. The executive secretary shall have the degree of Bachelor of Arts or its equivalent in college credits. The board shall meet annually in Jefferson City and at such other times and places as the members of the board may designate, and shall keep a record of its proceedings and a register of all applicants for the holder of certificates of licensure. The records and register shall be prima facie evidence of all matters recorded therein. Four members of the Board shall constitute a quorum.

3. The board shall have a common seal and shall formulate rules and regulations to govern its actions. It may, by regulation, formulate, adopt and enforce Codes of Professional Conduct governing the professional activities of its licensees. The president and secretary shall have power to subpoena witnesses and to administer oaths. Provision shall be made by the Division of Public Buildings for office facilities in Jefferson City, Missouri, where the records and register of the board shall be maintained.

Section 3. 1. All persons desiring to practice as physicians and surgeons in this state shall appear before the board at such time and place as the board may direct and be examined as to their fitness to engage in such practice. All persons applying for examination shall make application in writing to the board at least thirty days before the date set for examination upon blanks furnished by the board.

2. The examination of candidates for licenses to practice as physicians and surgeons shall be in two parts or sections, and shall be known as Part I and Part II. Part I of the examination may be given at the completion of two years of the professional education required by this section, or may be taken in conjunction with the examination required under Part II. Part I shall be given by the board and shall be taken and passed by all applicants, and the examination given at any particular time shall be the same for all candidates and the same subjects shall be included and the same questions shall be asked. The board shall not be permitted to favor any particular school or system of healing. Part I of the examination shall embrace, in relation to the entire human body, the subjects of anatomy, histology, pathology, physiology, bacteriology or microbiology, biochemistry, physical diagnosis, sanitation and hygiene. No candidate shall be held to have passed Part I of the examination unless he has made an average grade of seventy-five per cent or more on the several subjects embraced therein with no grade lower than sixty per cent on any one subject.

3. Part II of the examination shall be given by the board and shall be taken by each candidate and successfully passed with an average grade of seventy-five per cent or more on the several subjects embraced in the examination with no grade lower than sixty per cent on any one subject. After the effective date of this act, except as specifically provided for licensing applicants from other states or under paragraph 7 of this section, and except for persons now holding certificates of licensure under Chapters 331, 334 and 337, RSMo 1949, no license of any kind may be issued to any person by the board until he has successfully passed Part I and Part II of the examination.

4. For candidates applying for certificates of licensure to practice as a physician and surgeon, Part II of

the examination shall embrace the subjects taught in reputable professional colleges sufficiently strict to test the qualifications of the candidate as a practitioner.

5. Examinations shall be written, or partly written and partly oral, and the examination papers shall be preserved by the board subject to public inspection for a period of three years after which they may be destroyed.

6. Candidates for licenses as physicians and surgeons shall be citizens of the United States and shall furnish satisfactory evidence of their good moral character and their preliminary qualifications, to-wit: a certificate of graduation from an accredited high school or its equivalent, and satisfactory evidence of completion of preprofessional education consisting of a minimum of sixty semester hours of college credits in acceptable subjects from a reputable college or university approved by the board. They shall also furnish satisfactory evidence of having attended throughout at least four terms of thirty-two weeks of actual instruction in each term and of having received a diploma from some reputable medical college or osteopathic college that enforces requirements of four terms of thirty-two weeks of actual instruction in each term, including two years experience in operative and hospital work at time of graduation, together with such additional information as the board may require. Any medical college approved and accredited as reputable by the American Medical Association and any osteopathic college approved and accredited as reputable by the American Osteopathic Association, and which meets the minimum requirements of this paragraph, is deemed to have complied with the requirements of this paragraph.

7. In determining the qualifications necessary for licensure as a qualified physician and surgeon the board may at its discretion accept the certificate of the National Board of Medical Examiners of the United States, chartered under the laws of the District of Columbia, in lieu of and as equivalent to its own professional examination. Every applicant for a license upon the basis of such certificate, upon making application showing necessary qualifications as above set out, shall be required to pay the same fee required of applicants to take the examination before the board.

Section 4. Upon the applicant paying a fee of $100.00, the board may, under regulations prescribed by it, admit without examination legally qualified persons who have met the educational requirements of this state and who hold certificates of licensure in any state or territory of the United States or the District of Columbia authorizing them to practice in the same manner and to the same extent as physicians and surgeons are authorized to practice by this act. Within the limits of this paragraph, the board is authorized and empowered to negotiate reciprocal compacts with like boards of other states for admission of licensed practitioners from Missouri in other states.

Section 5. 1. There is hereby established in the office of the State Treasurer a fund to be known as the "State Board of Registration for the Healing Arts Fund." All fees of any kind and character authorized to be charged by the board shall be paid to the Director of Revenue and shall be deposited by the State Treasurer into this fund, to be disbursed only in payment of expenses of maintaining said board and for the enforcement of the provisions of this act; and no other money shall be paid out of the State Treasury for carrying out the provisions of this act. Warrants shall be issued on the State Treasurer for payment out of said fund on the certification of the president and secretary of the board.

2. The board shall charge each person applying to and appearing before it for examination for certificate of licensure to practice as physician and surgeon, a fee of $25.00, $12.50 of which is for taking Part I of the examination and $12.50 of which is for taking Part II of the examination. Should such examination prove unsatisfactory and the board refuse to issue a license thereon, the applicant failing to pass such examination may return to any meeting within the next twelve months thereafter and be examined without extra charge; but no temporary license may be issued to such person.

Section 6. 1. Every person holding a license from the board shall have it recorded in the office of the county clerk of the county in which he maintains an office and the record shall be endorsed thereon. The clerk is authorized to charge a fee of $1.00 for recording the license, to be paid by the person offering it for record. Any person removing to another county to practice shall have his license recorded in the county to which he removes, and the holder of the license shall pay said clerk of said county the usual fee for making the record. The county clerk shall keep, in a book provided for that purpose, a complete list of the licenses recorded by him, with the date of issue.

2. Any person neglecting to record his license before entering upon the practice shall be guilty of a misdemeanor, and, on conviction thereof, shall be fined not less than $50.00, and on failure to record said license for thirty days after such conviction, he shall be liable to a fine of not less than $100.00.

Section 7. 1. Upon due application therefor and upon submission by such person of evidence satisfactory to the board that he is licensed to practice in this state, and upon the payment of fees required to be paid by this act, the board shall issue to him a certificate of registration under the seal of said board, which shall recite that he is duly registered for the biennium specified. The certificate of registration shall contain the name of the person to whom it is issued and his office address and residence address, the date and number of the license to practice, and such other information as the board deems advisable.

2. Every person shall, upon receiving such certificate, cause it to be conspicuously displayed at all times in every office maintained by him in the state. If he maintains more than one office in this state, the board shall without additional fee issue to him duplicate certificates of registration for each office so maintained. If any registrant shall change the location of his office during the biennium for which any certificate of registration has been issued, he shall, within fifteen days thereafter, notify the board of such change and it shall issue to him without additional fee a duplicate registration certificate for the new location.

Section 8. 1. Every person licensed under the provisions of this act shall on or before the thirtieth day of June following the date on which this law becomes effective, and on or before the thirtieth day of June of each odd numbered year thereafter, apply to the board for a certificate of registration for the ensuing two years. The application shall be made on a form to be furnished by the board, and shall state the applicant's full name and his office and residence addresses and the date and number of his license, and such other facts as shall tend to identify him and his license as the board may deem necessary. If the first registra-

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tion called for by this paragraph occurs during an even numbered year, the certificate to be issued shall be for a one year period, and credit shall be given for any fees paid under any prior law for a certificate of registration for the same period.

2. The board shall on or before the 1st day of June of each odd numbered year mail to each person licensed in this state, at his last known office or residence address, a blank form for application for registration. The failure to mail such form of application or the failure to receive same does not, however, relieve any person of the duty to register and pay the fee required by this act nor exempt him from the penalties provided by this act for failure to register.

Section 9. Each applicant for registration under this act shall accompany the application for registration with a registration fee in the sum of $5.00 to be paid to the director of revenue for the biennium for which registration is sought. If the application is filed and the fee paid after July first at the beginning of the biennium in which registration is sought, the amount of such fee shall be the sum of $5.00, plus an additional 50 cents for each month or part thereof from July first of such year to the date when the application is filed and fee paid; but whenever in the opinion of the board the applicant's failure to register is caused by extenuating circumstances including illness of the applicant, the additional fee of 50 cents may be waived by the board. Whenever any new license is granted to any person, under the provisions of this act, the board shall, upon application therefor, issue to such licensee a certificate of registration covering a period from the date of the issuance of the license to the commencement of the biennium next following the date of issuance of such license without the payment of any registration fee.

Section 10. 1. The board may refuse to license individuals of bad moral character, or persons guilty of unprofessional or dishonorable conduct, and they may revoke or suspend licenses, or other rights to practice, however derived, for like causes, and in cases in which the license has been granted upon false and fraudulent statements, after giving the accused an opportunity to be heard in his defense before the board as herein provided. Violation of the Code of Professional Conduct, habitual drunkenness, drug habit or excessive use of narcotics, or producing criminal abortion, or soliciting patronage in person or by agents, under his own name or under the name of another person or concern, actual or pretended, shall be deemed unprofessional and dishonorable conduct within the meaning of this section.

2. At least twenty days prior to the date set for any hearing before the board for the revocation or suspension of license, the secretary of the board shall cause written notice to be served personally upon the defendant in the manner prescribed for the serving of original writs in civil actions. The notice shall contain an exact statement of the charges and the date and place set for the hearing before the board. If the party thus notified fails to appear, either in person or by counsel, at the time and place designated in the notice, the board shall, after receiving satisfactory evidence of the truth of the charges and the proper issuance and service of notice, revoke or suspend said license. If the licentiate appears either in person or by counsel, the board shall proceed with the hearing as herein provided. The board may receive and consider depositions and oral statements and shall cause stenographic reports of the oral testimony to be taken and transcribed, which, together with all other papers pertaining thereto, shall be preserved for two years. If a majority of the board is satisfied that the licentiate is guilty of any of the offenses charged, the license shall be revoked or suspended for such period of time as may be determined.

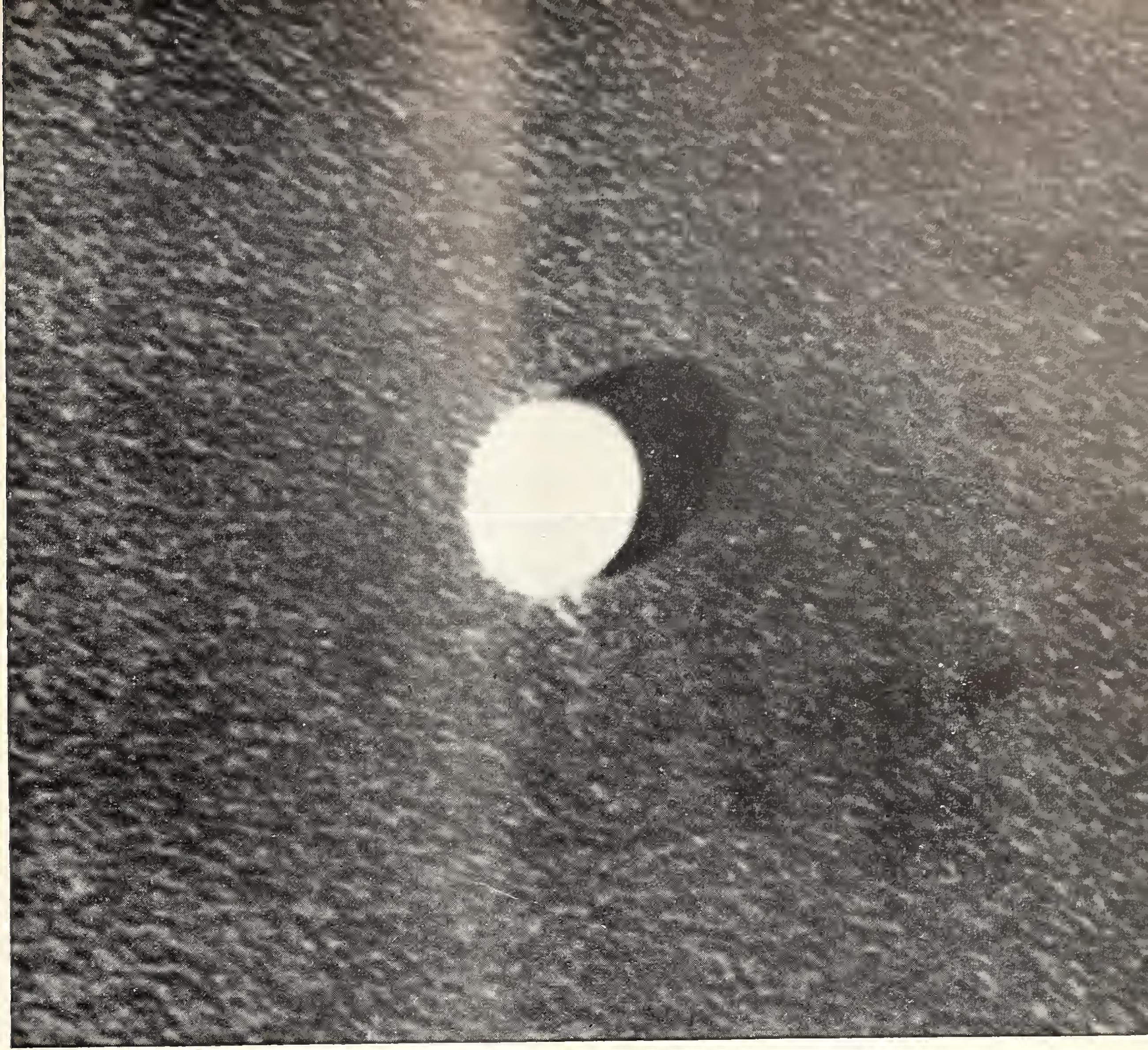
3. Any person whose license has been or shall be revoked or suspended by the board shall have the right to have the proceedings of the board revoking or suspending his license reviewed as provided by law for the review of decisions, rules and regulations of administrative officers and bodies existing under the constitution and laws of this state.

Section 11. Any person licensed to practice as physician and surgeon in this state who has retired or who may hereafter retire from such practice shall not be required to register as required by this chapter, if he shall file with the board an affidavit, on a form to be furnished by the board, which shall state the date on which he retired from such practice and such other facts as tend to verify the retirement as the board may deem necessary; but if he thereafter re-engages in the practice, he shall register with the board as provided by this act.

Section 12. Whenever in this act any duty or service is required to be performed by any county clerk, the duty or service in the City of St. Louis shall be performed by the health commissioner, as if he was specially named to perform these duties and services, and he shall receive the same compensation therefor as this act provides shall be paid to the county clerk; and whenever in this act the word county is used it shall include the City of St. Louis the same as if said city is specially named.

Section 13. It is not intended by Sections 1 to 12 to prohibit isolated or occasional gratuitous service to and treatment of the afflicted, and Sections 1 to 12 shall not apply to physicians and surgeons commissioned as officers of the Armed Forces of the United States while in the performance of their official duties, nor to any licensed practitioner of medicine and surgery in a border state attending the sick in this state, if he does not maintain an office or appointed place to meet patients or receive calls within the limits of this state, and if he complies with the statutes of Missouri and the rules and regulations of the department of public health and welfare relating to the reports of births, deaths and contagious diseases; and Sections 1 to 12 shall not apply to Christian Science practitioners who endeavor to prevent disease or suffering exclusively by spiritual means or prayer, so long as quarantine regulations relating to contagious disease are not infringed upon; but no provision of this section shall be construed or held to in any way interfere with the enforcement of the rules and regulations adopted and approved by the division of health of the state department of public health and welfare or any municipality under the laws of this state for the control of communicable or contagious diseases.

Section 14. The question as to whether any school is one entitled to recognition by the board as a reputable professional school of good standing, and the action of said board in refusing to permit an applicant to take an examination, is declared to be a question of fact and any person aggrieved by reason of the action of the board has the right to have the question reviewed as provided by law for the review of the decisions, rules and regulations of administrative officers or bodies existing under the constitution or by law.



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Section 15. Any officer, agent or employee of any professional school or college, whether organized as a corporation, association, partnership, common law trust or individually owned and operated, who knowingly permits the issuance of any diploma or any certificate of graduation from any such school or college as aforesaid to anyone, or anyone who knowingly accepts or receives such a certificate or diploma, unless the recipient or beneficiary thereof has actually attended in good faith at least eighty per cent of the minimum curriculum prescribed in this act for such character of schools, in this or some other state, and has received instruction in and has satisfactorily passed all the courses and subjects purporting to be required by said school for completion of its course and has actually been granted a degree by vote of the trustees of said college or school, shall be guilty of a misdemeanor.

Section 16. Chiropractic practitioners are subject to the state and municipal regulations relating to the control of communicable or contagious diseases, the reporting and certifying of deaths, and all matters pertaining to public health, and such reports are to be accepted by the officer or department to whom such report is made.

Section 17. The provisions of this act are not to be construed to apply to dentists licensed under the provisions of Chapter 332; to nurses licensed under the provisions of Chapter 335; to optometrists licensed under the provisions of Chapter 336; to pharmacists licensed under the provisions of Chapter 338; or to chiropodists licensed under the provisions of Chapter 330, RSMo 1949, and Amendments thereto.

Section 18. It is unlawful for any person licensed as a midwife only to engage in any other branch of medical practice or to advertise herself as doctor, doctress or physician or to use any letters before or after her name on a sign or otherwise, indicating that she is authorized to or does engage in any other branch of medical practice.

Section 19. It is unlawful for any person not licensed and registered under this act, (a) as physician and surgeon, to practice the healing arts or treat the sick; (b) as chiropractor, to engage in the practice of chiropractic; or (c) as midwife, to engage in the practice of midwifery, in the State of Missouri.

Section 20. 1. Any person who violates Section 19 of this act shall, upon conviction, be adjudged guilty of a misdemeanor for each or every offense; and treating each patient is considered a separate offense.

2. Any person filing or attempting to file as his own a license of another or a forged affidavit of identification, shall be guilty of a felony and upon conviction thereof shall be subjected to such fine and imprisonment as is provided by the statutes of this state for the crime of forgery in the second degree.

3. Upon receiving information that any provision of Sections 19 and 20 of this act has been or is being violated the secretary of said board or other person designated by the board shall investigate the matter and, upon probable cause appearing, the secretary shall, under the direction of the board, file a complaint with the prosecuting or circuit attorney of the county or city in which the alleged offense occurred.

Section 21. If it appears upon complaint to the board by any person, or it is known to the board that any person is violating any of the provisions of this Act, the board, by its own proper counsel, or the prosecuting attorney of the proper county, or the Attorney General, may investigate and may, in addition to any other remedies, bring action in the name of and on behalf of the State of Missouri at the request of said board against any such person to enjoin him from such violation. The action may be commenced in the county in which the defendant resides or in the county in which the defendant engages in or attempts to engage in the matters complained of. The pleadings, practice and procedure in such action shall be in accordance with the law of this state governing injunctions generally, except that such an injunction may be issued without proof of actual damage sustained by any person or proof that any person will sustain damage if such injunction is not granted.

Section 22. 1. On the effective date of this Act all persons licensed under the provisions of Chapter 334 as practitioners of medicine and surgery and all persons licensed under the provisions of Chapter 337 as osteopathic physicians shall be deemed to be licensed as physicians and surgeons under this act and subject to all of the provisions of this act.

2. On the effective date of this Act all persons licensed under the provisions of Chapter 331 as chiropractors shall be deemed to be licensed as chiropractors under this act and subject to all of the provisions of this act.

3. On the effective date of this Act all persons licensed under the provisions of Chapter 334 as midwives shall be deemed to be licensed as midwives under this Act and subject to all of the provisions of this act.

4. On the effective date of this act all funds in the state treasury deposited to the credit of the State Board of Medical Examiners as provided by Chapter 334, all funds in the state treasury deposited to the credit of the Board of Osteopathy fund as provided by Chapter 337, and all funds in the state treasury deposited to the credit of the Chiropractic board fund authorized by Chapter 331, shall be transferred to and deposited in the "State Board of Registration for the Healing Arts Fund," and to the extent that the various funds so transferred may be adequate, all appropriations heretofore made against the funds mentioned herein shall be valid and shall be deemed to have been made against the state board of registration for the healing arts fund.

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Letters to Missouri Medicine

The Emigrants

To the Editor:

I feel constrained to clarify and amplify the figures on "Population" given in the June number of Missouri Medicine. The total increase—150,000—is nearly correct for the ten years, but the number of births should be about 85,000 as the annual number. The total number for the ten years was about 800,000. From this we deduct the deaths, about 400,000, leaving an increment of 400,000. We have estimated about 50,000 as emigrants; this leaves 100,000 to be added as a surplus for ten years. The balance, 250,000, is the estimated total of emigrants.

We rear lots of children but the adolescents do not stay in Missouri. Where do they go? The answer is California chiefly, a state which can boast of a 51 per cent increase in population. Of course, other Western states also add to the increment, as Texas, Oregon, New Mexico. With the 250,000 emigrants we may safely incorporate about 300 physicians for they also yield to the drive to "go west." Can our medical schools instruct a sufficient number of young men to replace our old doctors at home and also train annually thirty more to go with the western travelers?

John Zahorsky, M.D.

First Aid Service

To the Editor:

It has been my endeavor for many years to reorganize the First Aid Service in St. Louis and St. Louis County so that first aid in case of accidents on the street may be rendered in the only rational way—by physicians, accompanying ambulances.

I met with some opposition when I talked about unsatisfactory first aid service, before the St. Louis County Medical Society, on October 22, 1952. At that time my motion to appoint a committee to look into this matter was postponed for an indefinite time. On the other hand, the Trauma Committee of the St. Louis Chapter, American College of Surgeons, accepted my proposition with acclamation at its meeting on March 31, 1953.

My interpretation from today was motivated by two short notes in Missouri Medicine of November 1954:

Peter V. Siegel, M.D., reports under "Crossroad Comment," how he could not stand any longer the unqualified treatment rendered by ambulances to injured people on the street.

Oscar P. Hampton, Jr., M.D., states under "Treatment Begins on the Street," how death following acute trauma can often be obviated by appropriate procedures and life saving measures.

I abide by my postulate, which I have explained repeatedly and extensively, namely, that first aid service has to be headed by a physician and the ambulances, going out for first aid must be accompanied by a doctor.

The artful treatment of fractures, dislocations, soft tissue wounds, before the patient is transported to the hospital, may save the patient serious complications or his life.

At poisonings, immediate washing of the stomach is necessary, and the required antidote must be administered at once.

Care must be taken that the upper air passage is not obstructed in case of drowning, suffocation, gas poisoning, strangulation, while artificial respiration has been resorted to.

First aid is of paramount importance for injured large external blood vessels, for internal bleeding or for shock.

In cases of imminent deliveries only the doctor will be able to decide whether he has time to transport the patient to the hospital or make immediate delivery on the spot.

One can see from the mentioned examples that life saving first aid in the majority of cases cannot be rendered by a driver of an ambulance, not even if he has taken a first aid course. Those accidents call for the professional knowledge and experience of doctors, who are specially trained in this field.

In the following paragraphs I wish to quote a few more observations:

Dr. Roscoe Webb, associate professor of surgery, University of Minnesota, Minneapolis: The question is often asked, "If you were the victim of an accident in your home community and receive a fracture of the thigh or leg, would you get approved first aid and transportation to the hospital? Too often the answer is in the negative, whether the physician interrogated is from a large metropolitan city or small community. The Committee of Trauma of the American College of Surgeons has annually been investigating first aid and transportation of the injured in five cities. Thus far the Committee has found conditions shockingly chaotic."

Dr. W. A. Altemeier, professor of surgery, University of Cincinnati, says: "The primary purpose of treatment of soft tissue wounds is to save life by arresting hemorrhage, maintain adequate respiration, preventing or controlling shock, relieving pain and anxiety, and controlling infection."

Dr. Harold Couch, assistant professor of surgery, University of Toronto, writes in the chapter of Hand Injuries about first aid: "If the doctor is fortunate enough to see the patient soon after the accident, he will promptly apply the basic principles of the care of wounds."

Dr. Alexander P. Aitken, professor of orthopedic surgery, Tufts College, Boston, explains: "The progress made in recent years in the treatment of acute trauma, has been due in part to the stress placed on adequate first aid and competent transportation of the injured."

I recapitulate: I propose, as I did before, that all groups, working in the First Aid Service, such as, physicians, health commissioners, hospital directors, sheriffs and councellors of the city and county and Red Cross workers, should come together and consider a reform in the unification and centralization of the apparatus of first aid.

Ernest Spitzer, M.D.

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BOOK REVIEW

NECK DISSECTIONS by James Barrett Brown, M.D., Professor of Clinical Surgery, Washington University School of Medicine, St. Louis; Chief Consultant in Plastic Surgery, United States Veterans Administration, Washington, D. C.; and Frank McDowell, M.D., Assistant Professor of Clinical Surgery, Washington University School of Medicine, St. Louis. Charles C Thomas, Springfield, Illinois. 1954. Price $7.50.

In their monograph on "Neck Dissection" Dr. Brown and Dr. McDowell have carefully reviewed the indications and technics for several operative procedures. The text is easy to follow as the authors have largely presented their own points of view arrived at through a large experience and controversial issues or variations of technic are not discussed in most instances.

It would seem that this book with its extensive bibliography most eminently succeeded in the dissemination of greater knowledge of the indications, feasibility and usefulness of neck dissection for metastatic carcinoma, which is the avowed purpose of

J. C. P., Jr.

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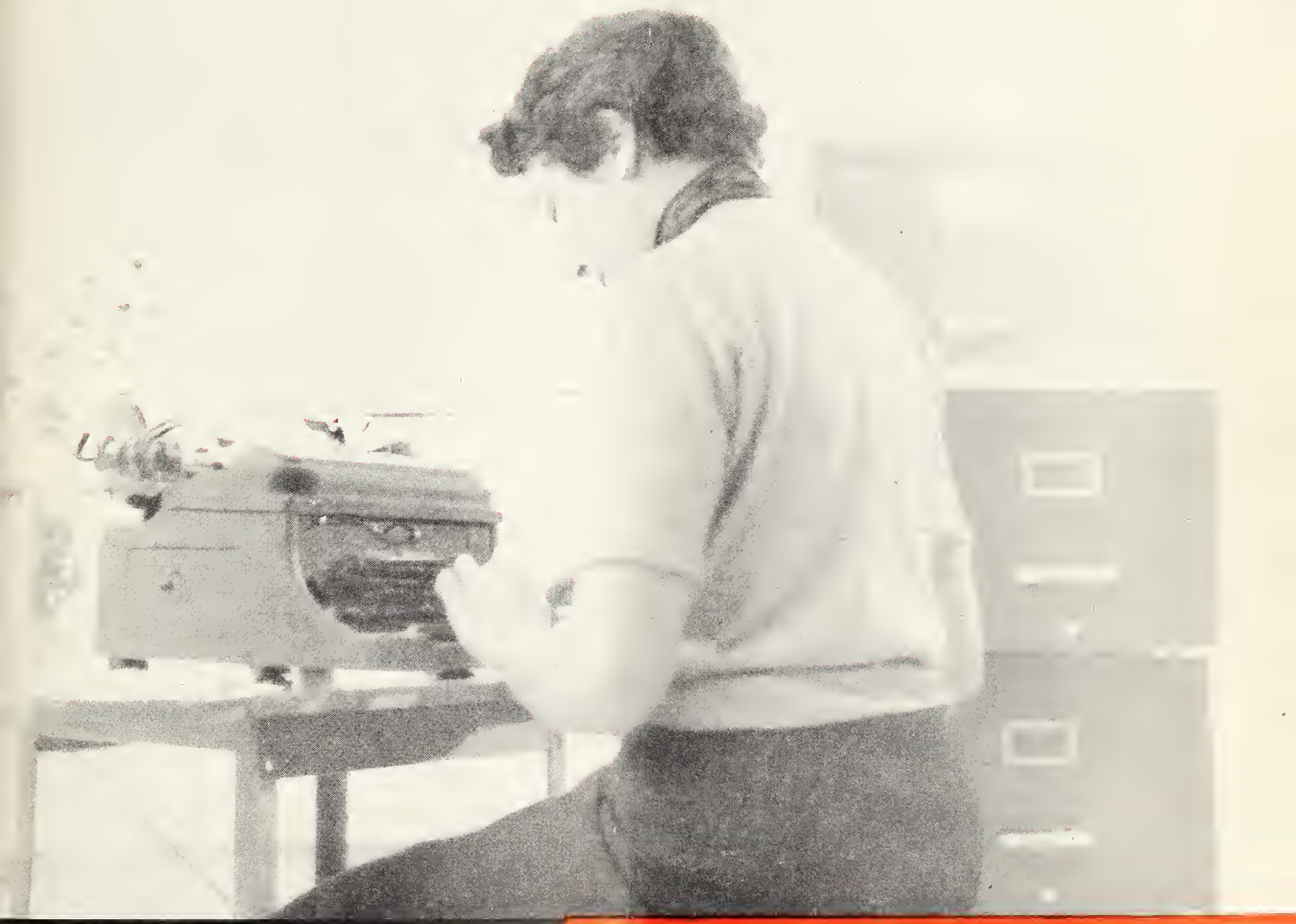

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South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)	9	C. W. Cooper	Thayer	A. C. Ames	Mountain Grove
Webster	8	C. R. Macdonnell	Marshfield	E. G. Beers	Seymour
West Central Missouri Medical Society (Bates-Cass-Cedar-St. Clair-Vernon)	8	O. B. Barger	Harrisonville	A. L. Hansen	Butler

Curiosa et Trivia

William B. McCunniff, M.D.

The average adult carries around about eight pounds of skin.

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Experimental evidence indicates that Demerol is almost twice as toxic in hot weather.

The greatest percentage of normal appendices removed as emergencies (50%) occurs between 8 p.m. and midnight.

Inquiries of 1,200 patients in South Carolina recently, reveals that 850 have had penicillin administered, 500 have had sulfonamides and 200 have taken aureomycin.

Rutledge, Georgia, a town of 550, has raised $3,750 to finance medical student Edward Leverett who will practice for four years in Rutledge after his graduation.

As of mid-1953, 16% of American families had outstanding medical debts—$200 million was owed to institutions and $900 million to doctors and dentists.

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Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

The St. Louis Childrens Hospital opened December 1. In all there will be beds for 225 children which makes this the largest general hospital in the United States devoted entirely to the care of sick children.

After an interim of fourteen years, the State Association will again have its annual meeting, its fifty-eighth, at St. Joseph, May 10, 11, 12, 1915. The Buchanan County Society will be the hosts.

The antinarcotic law designed to control and limit the sale of habit forming drugs, recently passed by Congress, will become effective March 1. On and after that date it will be unlawful for physicians to have in their possession any opium of coca leaves or their salts, derivatives or preparations, unless they are registered with the United States internal revenue collector of their district.

The December issue of the *Journal of Michigan State Medical Society* calls attention editorially to the danger of using poisonous fly destroyers. From July 1 to October 15, 1914, forty-five cases of poisoning of young children were reported in the press of a few states, and it is pointed out that the symptoms of arsenical poisoning and cholera infantum are similar. Phosphorous matches have been abolished. Poisonous fly killing preparations ought to be abolished.

Drs. Fayn, Lloyd and Wieland, advertising doctors of St. Louis, who were released several weeks ago by the United States Court on account of a faulty indictment, have been rearrested on a new indictment.

Dr. A. E. Hertzler, Kansas City, has done pioneer work in local anesthesia and has stimulated great interest in this field.

TWENTY-FIVE YEARS AGO

Society meetings have been disrupted during December and January. The whole state has suffered from exceedingly heavy snowfall, subzero temperatures and, in some sections, floods have added to the discomfort of deep snows and extreme cold.

Charged with the issuing of fraudulent medical licenses, Colonel W. H. H. Miller, former head of the Illinois State Department of Registration and Education, was fined $2,000 and sentenced to seven months and one day in the jail by Judge Jacob Hopkins.

The Western Surgical Association held its annual meeting at Del Monte, California, December 12-14, 1929, under the presidency of Dr. E. Starr Judd, Rochester, Minnesota. The new officers of the association are: President, Dr. Carl E. Black, Jacksonville, Illinois; secretary, Dr. Frank R. Teachenor, Kansas City, re-elected; treasurer, Dr. T. G. Orr, Kansas City, re-elected; recorder, Dr. Harry P. Ritchie, St. Paul.

The death of Victor Clarence Vaughan on November 21, 1929, has deprived American medicine and public health of a great leader. He was born on October 27, 1851, at Mount Airy, Missouri. From 1874 until his retirement in 1921 he was connected with the University of Michigan. Dr. Vaughan went to the University of Michigan in 1874, after having taught Latin for two years at Mount Pleasant College, Missouri, where he graduated in 1872. He was president of the Association of American Physicians in 1908 and of the American Medical Association in 1914. After serving as professor in various medical departments, he became dean of the medical school in 1891.

TEN YEARS AGO

The annual lecture of the Alpha Omega Alpha Fraternity at Washington University School of Medicine was presented by Dr. Joseph Earle Moore, Johns Hopkins University School of Medicine, Baltimore, on November 10. His subject was "Chemotherapy of Syphillis."

The December issue of *Fortune* carries an article of interest to physicians, "U. S. Medicine in Transition."

Lieutenant Colonel Durward G. Hall, Springfield, has been assigned as Director of the Military Personnel Division, Personnel Service, Office of the Surgeon General.

Promoted from Major to Lieutenant Colonel are: Dr. F. I. Wilson, Kansas City, Dr. Winton T. Stacy, St. Joseph, Dr. Hilen K. Wallace, St. Joseph.

Major Ralph Coffey, Kansas City, was in St. Louis recently on his way back in this country from the European theater.

Died: Philip McClellan Steckman, M.D., Plattsburg, a graduate of Jefferson Medical College of Philadelphia, 1889; member and former president and secretary-treasurer of the Clinton County Medical Society; age 79; died November 11.

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Missouri Academy of General Practice

KENNETH GLOVER, M.D.

At the suggestion of the journal committee and Tom O'Brien, our executive secretary, and following the request of Dr. Wm. J. Shaw, Fayette, to be released of this responsibility, I was requested to present this and following articles on behalf of the Missouri Academy of General Practice. In this first article, I would like to continue the discussion of postgraduate training which appeared in the December issue. In this, Dr. Shaw gave the over-all national picture which was quite thorough. I should like to discuss the status of postgraduate training in Missouri.

For the last four years, under the auspices of the Missouri Academy, there have been sectional meetings which have offered one afternoon and evening of study each month, starting in October and lasting for six months. Each of these gives five hours of formal training, allowing the participant to obtain thirty hours each year if he attends all sessions. Since only fifty hours in three years are required, this presentation alone makes it possible for the requirements to be met easily. However, the Missouri State meeting at Jefferson City has given formal credit of ten hours this year and the American Academy meeting is formal credit along with the Kansas City Southwest Clinical Society meetings which are held each fall. Both St. Louis and Kansas City areas have various other programs which offer formal credit. In our own Southwest Missouri area this year, we have three two hour credits given at each of three meetings of the Ozarks Medical Society during November, December and January, in addition to five hour credits once a month offered at Springfield under the auspices of the Greene County Society from the Missouri University and at Joplin under auspices of the Jasper County Society from the Kansas University Medical School. Each section of Missouri has been so divided into areas for these district programs that rural Missouri is covered adequately for this training. No longer does the practitioner in the small town have to be away from his work for several days going to the metropolitan area to obtain this training.

For informal credit of 100 hours in three years, each doctor may count his regular staff meetings; his regular society meetings, which are not classified as formal training; the Missouri State Medical meeting each year; Mississippi Valley; Southern Medical; Councilor district meetings, and others. There is no question but that some of this informal training is just as valuable as the formal. Since the question of which is formal and which is not has been discussed annually in the Congress of Delegates at the AAGP, it may be stated that all

(Continued on page 161)

Crossroads Comment

PETER V. SIEGEL, M.D.

Dear Aunt Helen:

Something happened today that made me feel purty good but at the same time I had cold chills running up and down my spine when I thought back at what could have happened. Mixed emotions mighty like that first big slug of north Morgan County moonshine years ago. I liked both but I reckon too much of either could get me down.

This morning I happened to be in our local Court House and was just leaving when someone hollered at me. I quick like noticed it was one of the local law. A few anxious moments passed and I allowed my conscious was clean, at least for the immediate past, so I stopped. He said he wanted to tell me he had been to the city yesterday and the Docs there had said he was clean as a whistle. His voice was clear and plain at first but before he was done it sort of quivered a little and his eyes got all watery.

Over two years ago he came in the back door of my office on a professional call—his profession—he served a summons on me. After performing his duty he said "Hey Doc, if you ain't too busy how about taking a look at my throat." I noticed that he had a frog in his throat all the while he was talking. I was busy but I did look and didn't like what I saw. In less than fifteen minutes he left with an appointment in the city for the next day.

He went on to thank me for what I had done and said that seeing how it was Thanksgiving time he had a lot to be thankful for. Just being alive was one reason.

Sure and I know all of us has similar patients and similar experiences. It just reminded me never to be too busy to take a good look and I too have many reasons to be thankful here at the Crossroads.

Your country nephew,
PETE

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Woman's Auxiliary

Mrs. W. E. Martin, *President*

Women have been accused of lack of interest in politics and legislation. The medical profession has become thoroughly entangled with a vastly expanding federal government. Therefore the medical profession and their wives through the Auxiliary must keep immediately, completely and accurately informed on all governmental matters affecting the practice of medicine.

We have a duty to the people to be sure that proposals affecting the nation's health be carefully evaluated before adoption. We must present the facts and sound conclusions based upon these facts to our legislators and administrators. The Washington office of A.M.A. through their newsletter helps us find this information and these facts. In the federal budget for this fiscal year we find that one sixth of the total medical bill of the nation is paid with federal funds! Over two billion dollars!

In the 83rd Congress 407 bills were of sufficient importance to the health of the nation to be followed by the Washington office. Of these only twenty-four became law and nearly all were changed in the process. When we remember that all bills introduced in both sessions total 16,470 we can understand that most congressmen welcome information from people they can trust. Congressmen will listen to information supplied by the Washington A.M.A. office, but they act on word from their own people.

Our State Chairman, Mrs. T. Reed Maxson, sends each County President and County Legislative Chairman the Washington newsletter in the hope that they will inform and discuss with their groups legislative and government affairs.

At the national conference in Chicago, Dr. Joseph Stetler told us the batting average of the Washington office of A.M.A. was good. Of the 407 medical bills studied, 300 were recommended. Forty-five prepared statements were sent out. Of these, thirteen were passed by Congress (two we opposed)—and the six not passed had perhaps the most publicity.

He assured us that the next Congress will have the same fights on the Bricker amendment and reinsurance, that probably the medical insurance for Government employees and dependants' medical care will pass. He said our united efforts to know the facts of legislation and then letting our Congressman know how we stand will make for better health legislation.

Let's be informed and then act to promote government matters affecting the practice of medicine.

Pettis County Pot Pourri

C. Gordon Stauffacher, M.D.

All but one patient had been admitted to my consultation room. The only person left in the reception room was a small boy.

I turned to my receptionist and asked "Is that her child or the next patient?"

"Neither, Doctor," she replied, "This fellow comes in every week to read the comics."

Definition of senile is what a man is when he watches his food instead of the waitress.

A new patient was being routinely questioned about her gastrointestinal tract. I asked her if she belched.

"Yes, doctor," she replied hesitantly, "Both ways."

My six year old just came in heaving a deep sigh. I asked what was the matter.

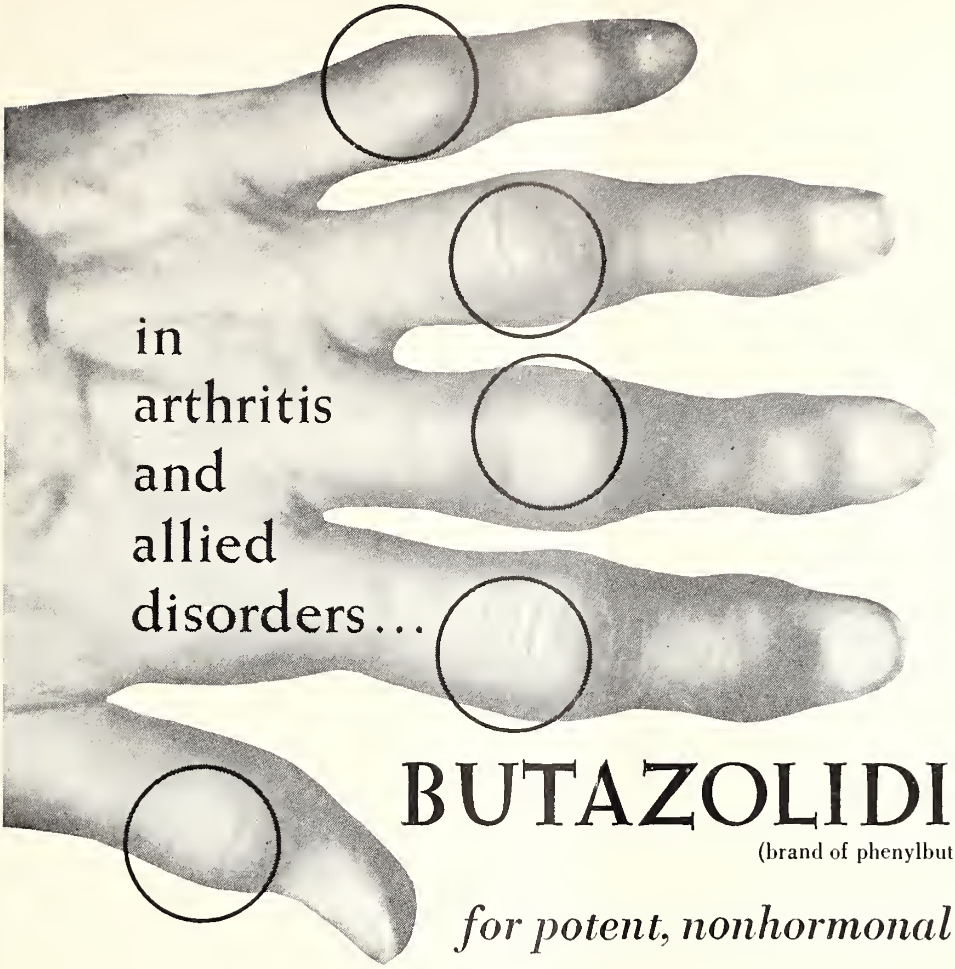
"Oh daddy," she said, "My ears hurt and I've been having hot flashes all day."

The other day a husband of a patient called me and asked, "Doctor, how soon should my wife expect her next ministerial period?"

I had no answer!

Jim says that a consulting physician is a doctor who is called in the last minute to share the blame.

Someone said—"Love begins when you sink in his arms—and ends with your arms in the sink."



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*MacKnight, J. C.; Irby, R., and Toone, E. C., Jr.: Geriatrics 9:111 (Mar.) 1954.

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President's Page

The 68th General Assembly of the Missouri Legislature opened with an address by Governor Donnelly in which he approved the budget requests of state mental hospitals and other eleemosynary institutions. He recommended more than $32,000,000 for operation of Missouri's seven mental institutions, an increase of about $7,300,000 more than the amounts he approved for them in the last session.

Recommendations for the different hospitals were $8,454,682 for the St. Louis State Hospital; $1,826,000 for the St. Louis State Training School for epileptic patients; $5,470,266 for State Hospital No. 1, Fulton; $4,265,000 for State Hospital No. 2, St. Joseph; $4,516,624 for State Hospital No. 3, Nevada; $3,861,250 for State Hospital No. 4, Farmington, and $3,973,398 for the Missouri State School for Feeble-Minded Patients, Marshall.

Prior to publication of this issue of Missouri Medicine, bills may be introduced to implement these appropriations.

Officers of the Senate are: President pro tem, Edward V. Long, Clarksville; majority floor leader, Floyd R. Gibson, Independence; minority floor leader, Hartwell G. Crain, St. Louis County.

Officers of the House are: Speaker, Roy Hamlin, Hannibal; speaker pro tem, Robert C. Smith, Jr., Columbia; majority floor leader, Omer H. Avery, Troy; minority floor leader, Samuel B. Murphy, Kirkwood.

The Senate Committee on Public Health and Welfare is composed of A. M. Spradling, Jr., Cape Girardeau, chairman; John W. Noble, Kennett; Michael Kinney, St. Louis; Edward J. Hogan, Jr., St. Louis; Frank Lee Wilkinson, Kansas City; William Orr Sawyers, St. Joseph; William E. Hilsman, St. Louis; Robert H. Linneman, St. Charles; Hartwell G. Crain, St. Louis County; Noel Cox, Spokane, and Harry E. Hatcher, Granby.

The House Committee on Public Health is composed of Claude E. Duckett, M.D., Lamar, chairman; Mrs. Jennie Walsh, St. Louis; Joseph W. Beckerle, St. Louis; John R. Clark, Kansas City; Charles B. James, Clarkton; A. C. Magill, Cape Girardeau; J. McKinley Neal, Kansas City; Charles H. Pulis, Mexico; I. E. Tullock, Maryville; George Boley, Luray; Mrs. Helen G. Hardy, Belle; Kelso Journey, Clinton; Fred R. McMahon, Fairfax; Wallace M. Pearson, D.O., Kirksville; William R. Sherman, Macon; Mrs. Clara Aiken Speer, Kansas City, and Noble G. Abbott, Stockton.

H E Petersen M.D.

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 52 February, 1955 Number 2

Intestinal Obstruction and Fluid Balance

FRANK H. HODGSON, M.D., *Kansas City*

THE INTELLIGENT management of intestinal obstruction requires a knowledge of fluid and electrolyte balance that will separate the modern surgeon from the surgeon of ten years ago. The patient's life often swings on a few threads of knowledge as to the how, when, where and why of replacement of various vital salts and water. The expanding scope of electrolyte balance has opened a challenge to the laboratory of the modern hospital to rapidly expand in personnel and technic to process the vital information and cut another swath in the ever declining mortality rates of this dread condition.

Small bowel obstructions assume an important role because of the diagnostic problem they present, and because of the often unfavorable prognosis. Excluding a relatively small percentage of tumors and chronic regional ileitis, all symptomatic lesions of the small bowel are seen as acute abdominal emergencies. Pain brings the patient to the doctor, in addition to which he may present one or more of the characteristic patterns of, (1) obstruction, (2) inflammation and (3) hemorrhage. The higher the obstruction, the more the vomiting, the less the distention, the greater the shock, the more severe the electrolyte imbalance.

ETIOLOGIC INCIDENCE

More than 80 per cent of intestinal obstructions involve the small bowel.[1] According to McIver's statistics,[2] more than 70 per cent of all small bowel obstructions are accounted for by obstruction bands and hernias. Dennis[3] states that about one third of all obstructions in the small intestines follow abdominal surgery. He states that approximately 50 per cent of the cases are due either to postoperative adhesions or inflammatory adhesions, 35 to 40 per cent due to external hernia strangulations and the remaining 10 to 15 per cent arise from other causes.

PATHOLOGIC PHYSIOLOGY
(LOCAL CHANGES IN THE BOWEL WALL)

When bowels become obstructed, that portion above the obstruction undergoes violent peristalsis. After a short time, paralysis ensues and the distention begins. As distention increases, absorption decreases and there is an accumulation of intestinal fluids. A venous congestion follows and then increased capillary permeability. Bloody fluid extravasates into the gut lumen and through the wall into the peritoneal cavity. Experimental work indicates that the blood volume may be reduced by as much as 55 per cent by this change.[4] As circulatory changes progress and weaken the bowel wall, it becomes permeable to bacteria and may set up peritonitis. If unrelieved, gangrene may result.

SIGNS AND SYMPTOMS

A careful history is an important help. The most prominent symptoms are nausea, vomiting, abdominal pain, distention and change in bowel habits. The higher the obstruction, the earlier and more forceful the vomiting; the lower the obstruction, the later the vomiting and the greater the distention. In lower ileal obstruction, vomiting may be fecal in character. Pain is invariably present, usually crampy or colicky or intermittent. It may be generalized, but localized by the patient as periumbilical. As strangulation develops, the pain becomes more constant and less cramp-like. In chronic or low grade obstruction, one sees recurring bouts of mild to moderate pain and distention brought on by eating.

PHYSICAL FINDINGS

Distention, prostration and high pitched auscultatory signs are found. Early suspicion of strangulation may be gained from signs of peritoneal irritation. In chronic obstructions, signs of weight loss and nutritional deficiency may be present.

ROENTGENOLOGIC EVIDENCE

Normally, no gas is visible in the small bowel except in the newborn infant. Gaseous distention of the small bowel indicates mechanical obstruction if the colon exhibits a normal or subnormal amount of gas. One may see fluid levels and thickened bowel wall in loops of intestine which indicate circulatory changes.

LABORATORY STUDIES

Urine studies, blood counts and plasma chemistry are of value to determine dehydration or electrolyte balance. Carbon dioxide combining power and plasma chloride determination indicate acid base disturbances. Serum protein and potassium values indicate need for replacement therapy. Leukocytosis may indicate strangulation.

SYSTEMIC EFFECTS

In high obstruction, one sees an early marked loss of electrolytes and fluid through vomiting. They may have a trend to alkalosis or acidosis depending on the relative loss of chloride ion or sodium ion. If chloride loss predominates, an alkalotic trend occurs as the chloride deficit causes a rise in the bicarbonate radical. In the loss of intestinal pancreatic fluid, the most important depletion is sodium, the chief base. The sodium loss causes dehydration, since water is sacrificed to maintain electrolytic osmotic pressure. In other words, the water-holding power of the body being dependent on the dissolved electrolytes, dehydration results from the loss of the irreplacable sodium. This dehydration causes a reduction in blood volume and finally a decrease in the intracellular fluids and electrolytes. The sodium deficit is accentuated by the replacement of potassium in the cells following intracellular fluid losses. A renal suppression results from the dehydration and its associated blood volume decrease with sodium loss. Nitrogen retention follows.

In addition to the loss of electrolytes, the transudation of fluid and blood into the gut lumen and peritoneal cavity represents a large loss of protein and red blood cells. This adds materially to the shock and prostration. The protein loss initiates osmotic pressure disturbances and edema, both generalized and local.

In low obstruction, there is less vomiting and loss of fluid and electrolytes but more distention with deleterious effects. In chronic and subacute recurrent small bowel obstruction the changes develop slowly and one may find deficiency states such as anemia, hypoproteinemia and avitaminosis.

TREATMENT

Prophylaxis.—When one considers that more than 50 per cent of intestinal obstructions of the small bowel are caused by obstructive bands and that the most frequent cause of these is surgery for acute appendicitis following which pelvic surgery[1, 3] is next, one sees the importance of prophylaxis in attempting to avoid adhesions. Every surgeon should be aware of this problem and project his thinking not only in doing the surgery scheduled but to avoid as much as possible future "adhesion" surgery by gentle handling of peritoneum, moist soft sponges and peritonization of raw surfaces.

REPLETION THERAPY

If clinical evidence exists of dehydration, it may be assumed that 5 to 7 per cent of the body weight has been lost.[3] It should be replaced in the first twenty-four hours. If marked hypotension is present, 2 per cent NaCl may be given with blood. Alkalosis usually responds to the use of isotonic saline solution although in refractory cases a K deficit should be considered. Severe acidosis is combatted with 1/6th molar sodium lactate in the absence of liver damage. If hepatic insufficiency is suspected, 1.3 per cent solution of $NaHCO_3$ is preferred. When relatively normal urinary output has been restored, KCl or acetate should be added to the fluids in the amount of 2 to 6 grams daily.

Fox[5] and his associates have reported promising results in the fluid and electrolyte replacement using a solution with electrolytic composition approximating plasma. Whole blood is of great value in the relief of shock and partial restoration of protein constituents. Berry[6] recommends 500 cc. of blood for every 3,000 cc. of replacement fluid.

Antibiotics should be given as a prophylactic procedure. O_2 helps in some cases by increasing the elimination of nitrogen through the lungs and thus decreasing the distention of the gut.

Tube decompression is a trying point. It is my opinion that one still sees negative suction used too long and too often when the indications for surgery are present and the fearful doctor procrastinates in a blind hope that maybe the obstruction will correct itself. He often is lulled into a false sense of security because the patient is doing satisfactorily on a parenteral and negative suction routine because, when the patient begins to slip after such prolonged therapy, he is a decidedly poorer risk both from the operative and postoperative fluid and electrolytic balance points of view.

Negative suction may be started and repeated x-rays checked to determine the reduction of the distended intestine. After distention is diminished or absent, a test for relief of the obstructing process may be ascertained by intermittent clamping of the tube to see if a return of the obstructive symptoms occurs. One must remember that there are clear-cut indications of when the tube is of value and that the misuse of this instrument may be responsible for the death of a patient. The two general indications for the use of the negative suction tube are: (1) in the paralytic type of intestinal obstruction due to an inflammatory condition, and (2) to improve the condition of the patient for surgical procedure. If a mechanical obstruction exists it practically always must be relieved by surgical intervention and to delay this surgery beyond the necessary time to prepare the patient for surgery is a dangerous procedure.

Therefore if the acutely obstructed patient exhibits signs of peritoneal irritation with an associated fever, tachycardia, hypotension and leukocytosis, operation can be delayed only long enough to improve the general condition with vigorous replacement therapy. If the tube does not result in rapid clinical improvements, surgery is the only recourse.

ANESTHETIC

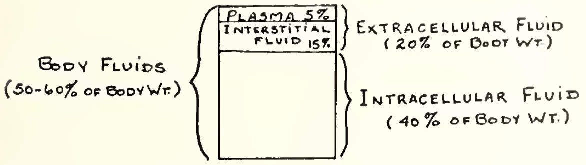
Additional relaxation is obtained and shock lessened by pouring an anesthetic agent on to the posterior parietal peritoneum beside the vertebral column bilaterally. This performs a simplified splanchnic block. Extreme gentleness should be used as dilated gut is easily ruptured. Intravenous fluorescence with ultraviolet light has been used to determine the circulation to the damaged intestine. Warm moist packs often are of benefit to help improve the circulation in questionably strangulated small gut. Occasionally it is of value to use papaverine intravenously to help relax vasospasm of traumatized gut. Technically an end-to-end anastomosis is usually the procedure of choice and is adequate except in children in whom the small caliber of the intestine usually warrants a use of a side-to-side anastomosis.

WATER AND ELECTROLYTE BALANCE IN SURGERY

Recent studies using heavy water and antipyrine have shown in the adult an average of from 50 to 62 per cent of the body weight to consist of water. In infants and children, Friss-Hansen and associates[7] reported values ranging from 70 to 83 per cent in the newborn infant. A gradual decrease was observed in the first six months, from 6 months to 11 years, values ranging from 53 to 63 per cent with no correlation as to age or sex. In the adult, the male averaged nearer 62 per cent while the female averaged nearer 50 per cent.

The body fluid may be divided into extracellular and intracellular compartments (see fig. 1).

TABLE 1


PLASMA 5%
INTERSTITIAL FLUID 15%
EXTRACELLULAR FLUID (20% OF BODY WT)
BODY FLUIDS (50-60% OF BODY WT.)
INTRACELLULAR FLUID (40% OF BODY WT.)

The extracellular fluid consists of 20 per cent of the body weight and may be subdivided into intravascular (plasma, 4½ per cent of the body weight), and extravascular (interstitial fluids, 15 per cent of the body weight).[8] The intracellular fluids constitute from 35 to 45 per cent of the body weight. The normal concentration of electrolytes are demonstrated in table 2.

Radio-active dilution studies reported by Forbes and Perley[10] show that the total exchangable body sodium averaged 42 mEq. per kilogram in males and 40 mEq. in females. They estimated that about 82 per cent of the total body sodium was measured by this method. Therefore the total would be in the range of 50 mEq. per kilogram in the adult.

Total body potassium has been measured by Corsa and associates.[11] They found the exchangable potassium in males to be 37 to 57 mEq. per kilogram with a mean of 46.3 mEq. per kilogram. Thus there are approximately the same number of mEq. of exchangable potassium and sodium in the body. Most of the sodium is extracellular or in bone and most of the potassium intracellular in metabolically active tissues.

TABLE 2

NORMAL PLASMA ELECTROLYTE VALUES IN MILLIEQUIVALENTS PER LITER

Electrolyte	*Average Value*	*Range of Normal*
NA +	142.0	135-150
K +	4.5	3.6-5.5
CA ++	5.3	4.7-5.8
MG ++	2.1	1.5-2.5
(HCO3) —	26.7	24.6-28.8
CL —	102.6	100-105
(SO4) ——	1.15	1.0-1.3
(HPO4) ——	2.0	1.5-2.5

Compiled by Henry T. Randall from the literature.

Before undertaking major surgery it is often wise to determine what a particular patient's normal electrolyte values are because of the extent of the range of the normal values.

GENERAL CONSIDERATIONS OF FLUID BALANCE

There are three general considerations in a study of fluid balance: (1) Basic requirements which are parenteral requirements that would be required normally by a patient deprived of oral intake; (2) Dynamic loss, the losses the patient has as a result of disease, trauma (surgery), or both; (3) Static debt, deficiencies or excesses of the patient of water, electrolyte and blood volume at the time he comes under treatment.

The total daily intake of water and electrolytes required will be the sum of the base line requirements plus the dynamic loss, plus a proportion of the deficiencies in water electrolyte and blood volume.

BASIC REQUIREMENTS

Water loss is represented by (1) urine, (2) evaporation through the lungs, (3) insensible perspiration. The urinary output should be 1,000 cc. or more. Postoperatively, kidneys do not function maximally and often patients have damaged kidneys because of age or disease. The fluids required for insensible perspiration and evaporation from the lungs runs between 800 and 1,000 cc. and about half of these are lost by each of these methods.

Another source of water in the semi-starving patient is preformed water present in tissues destroyed to provide calories, and water of oxidation formed by combustion of these tissues, and of administered calories. Water of oxidation equals 12 cc. per 100 calories or amounts to about 200 to 300 cc. per day.[12] The preformed water amounts to about 200 cc. a day, therefore, an additional water factor of 400 cc. per day is added to the intake and output and is reflected by the weight loss. The total water requirements run between 1,800 and 2,500 cc. per day.

ELECTROLYTE REQUIREMENTS: (SODIUM CHLORIDE)

Normal sodium chloride intake averages 5 to 10 grams per day (sodium, 100 mEq., chloride, 105 mEq.).[9] Since it is well established that patients immediately postoperatively are incapable of excreting large loads of sodium and chloride ions, the base line requirement is best set at about two thirds of the normal daily intake as a maximum. Such an intake is well satisfied by giving a maximum of 500 cc. of isotonic saline solution (0.9 per cent) for each twenty-four hours. There are numerous reasons for decreasing the amount of sodium chloride intake and it should be increased only when deficits are known to exist.

GLUCOSE REQUIREMENTS

It has been shown that 100 grams of glucose in each twenty-four hour period diminished the amount of nitrogen lost in the starving patient by 50 per cent.[13] In addition this glucose diminished withdrawal of body water and decreased the renal excretion load. Thus 100 grams of glucose are an essential part of the base line requirement.

Werner and associates[14] have shown that in less severe operations such as cholecystectomy, it is possible to avoid any nitrogen loss by giving from 30 to 35 calories per Kgm. of body weight. This requires administration of between 3,000 and 5,000 cc. of mixtures of 10 per cent glucose and 10 per cent amino acids or a combination of dextrose, amino acids and alcohol in a minimum volume of 3,500 cc. This of course takes a prolonged administration. Glucose is not utilized faster than 0.5 to 0.7 grams per Kgm. per hour.

OTHER IONS

It has become increasingly apparent that the prophylactic administration of about two to three grams of potassium chloride will supply about one half of the normal daily potassium intake (30 to 40 mEq.), and will prevent potassium deficiency.[16] There are certain other factors that alter the base line requirements. An increase may be necessary in a large size person, in youth, a person with increased basal metabolism rate, and in fever, while a decrease in base line requirements is seen in a small size person, in old age, in a decreased basal metabolism rate, in cardiac failure, and in oliguria. In adults the average base line water requirement is 35 to 45 cc. per Kgm. per day. In infants, the requirement rate raises to 150 cc. per Kgm. per day.[15] Two special considerations decrease base line requirements: (1) the generalized overexpansion of extracellular fluids as seen in cardiac failure in which salt and water restrictions are the rule, and (2) renal failure such as seen in prolonged hypotension or following incompatible blood transfusions.

DYNAMIC LOSS
(EXTERNAL LOSSES AND INTERNAL FLUID SHIFTS)

As a result of traumatic experience, operation and anesthesia, the chain of events is set in action which has been described as the alarm reaction. Those that are of the greatest immediate importance to the surgeon are intracompartmental fluid shifts, transitory water retention accompanied by a longer retention of sodium and chloride ions, and a marked excess of loss of potassium and nitrogen with potassium loss in excess of its intracellular ratio to nitrogen. The increase of the extracellular fluid space is initiated at the time of operation and appears to reach its zenith about the second or third postoperative day.[9] It consists of an expansion of about two to three liters of the extracellular fluid space as measured by Inulin. Lyons and associates[17] reported a 15 per cent increase in plasma volume with a drop in serum chloride by the third postoperative day as a normal postoperative response. The extracellular fluid space expansion begins to resolve by the third or fourth postoperative day, in less severe surgical procedures. It may persist for a week or more following major procedures, particularly if there are postoperative complications. It is the postoperative retention of sodium which was observed to be responsible for an overexpansion of the extracellular fluid space with edema formation in patients who were given large quantities of sodium chloride above the losses in the immediate postoperative period. This led to the reports by Coller[18] and many other subsequently that patients postoperatively were intolerant to the administration of sodium chloride.

GASTROINTESTINAL TRACT LOSSES

The secretions of the gastrointestinal tract per day are given as saliva 1,000 to 1,500 cc., gastric juice 2,500 cc., bile 700 to 1,000 cc., pancreatic juice 1,000 cc., small bowel 3,000 cc., giving a total of 8,000 to 10,000 cc. of gastrointestinal secretions per day. Thus the total gastrointestinal tract secretions are approximately four times the normal fluid intake. In pathologic states, these volumes may be exceeded. Not only does the loss of gastrointestinal fluid represent a loss in water which must be replaced volume for volume, but also a loss in electrolytes. Previous observations have indicated that gastrointestinal tract secretions were approximately isotonic and gave rise to the idea that the logical replacement for them was isotonic sodium chloride. This serves well enough if renal function is good and the kidneys can discriminate among the ions necessary for replacement and excrete hypertonic urine. Unfortunately, in the critically ill patient, both before and after the operation, this renal selectivity is often much impaired and as a result a more quantitative replacement of gastrointestinal tract drainage is necessary. There is a variation in the amount of electrolytes lost depending upon what area the obstruction involves. There is considerable more potassium loss in the lower ileum than there is in the upper portion of the intestinal tract. Likewise, more sodium is lost from the ileum by about twice as much as from either the cecum or the gastric juice. There is a fairly uniform loss of chlorides in obstructions down to the cecum.

An understanding of the different types of electrolyte losses from the gastrointestinal tract is essential to their adequate replacement. It is not necessary to quantitate replacement when drainage from the gastrointestinal tract is small, in the order of 500 to 1,000 cc. per day, and of short duration, no more than one or two days. However in patients who are seriously ill, and whose gastrointestinal tract drainages are large in volume or persist over many days, a more quantitative replacement is necessary. If laboratory facilities are available and the quantities of gastrointestinal tract drainages are large, analysis of their content and quantitative replacement is in order. If not, an approximation is necessary. One should remember that it has been shown that a persistently alkaline urine may result in damage to the kidney tubules, although, in all probability, simultaneous dehydration is necessary.[19]

OTHER EXTERNAL LOSSES

Excessive Sweating.—Sweat loss is exceedingly variable both in amount and electrolyte concentration. In hot and humid weather from 2,000 to 4,000 cc. or more can be lost per day. Sweat contains from 30 to 70 mEq. each of sodium and chloride ions per liter. Sweat loss is best estimated by daily or more frequently weighing of the patient and sweat should in general be replaced parenterally with a one third to one half volume of 0.9 per cent of sodium chloride and the remainder as nonelectrolyte containing fluid.

INTERNAL FLUID SHIFTS

Water and electrolytes may be effectively lost to the circulation and extracellular fluid space without actually leaving the body itself. One of the best examples of the situation is the case of the intestinal obstruction. In the obstructed area there is rapidly accumulated edema fluid which contains electrolytes, essentially those of extracellular fluid composition, together with such protein as leaks through the damaged capillary walls. The area of entry contains large volumes of fluid but this fluid is unavailable to the rest of the body. An area of acute infection, in any serous cavities, behaves in much the same fashion. Thus a patient with acute peritonitis or empyema has a similar problem. Fluid accumulated within the body, yet unavailable to it, amounts to the creation of a third fluid space which depletes both the extracellular and intracellular compartments.

Since the composition of a third space fluid is essentially that of extracellular fluid and since it results in internal dehydration, the replacement which is required is in terms of the composition of extracellular fluid and, frequently, if protein loss is high, of plasma. At the end of forty-eight to seventy-two hours, usually longer in the case of infections and crush injuries, the third space begins to resolve. When this occurs, replacement of electrolytes and water must be stopped or the patient obtains an auto-infusion of water and extracellular electrolytes from the resolved third space. Fluid pooled in the gut in the ileus results in internal dehydration. During the acute phase, partial replacement of the fluid loss is necessary in order to maintain circulating volume and extracellular fluid space at a functioning level. From 2,000 to 3,000 cc. of fluid may be accumulated within the bowel in a case of marked ileus. If the fluid is subsequently drained it becomes an external loss. If not, as the bowel recovers, the fluid will be reabsorbed and provide the same type of return fluid electrolyte as seen in the resolving phase of the patient with a burn or crush injury.

STATIC DEBT

When a patient is first seen he must be evaluated to determine if a deficiency or excess exists of his fluid, electrolytes and blood volume. Many cases of overenthusiastic treatment may result in excesses although they may also exist in such pathologic conditions as cardiac failure, nephritis, nephrosis and cirrhosis.

The effect of dehydration depends not only on the amount of water lost but on the rapidity of the loss. Rapid dehydration has a more marked effect on the patient than slow dehydration although the amount of fluid may be less in the acute form.

Rapid dehydration as seen in hemorrhage or high intestinal obstruction results in a withdrawal of fluid and electrolytes mostly from the plasma and interstitial fluid and reduces the circulating volume.

If a patient loses water rapidly there follows a transfer of fluid from the intracellular to the extracellular space and secretion of hypertonic urine and electrolytes and developes an acute electrolyte deficiency and hypotensive shock. A typical example of this is seen in high intestinal obstruction with copious vomiting.

Thus one must evaluate the type and amount of dehydration to know what to administer for replacement therapy. Specific losses such as hemorrhage should be replaced by blood and plasma, burns by plasma or a plasma substitute. In chronic dehydration in which the water loss is from the intracellular compartment and replacement requires water, potassium and possibly phosphate with little sodium chloride and bicarbonate. In rapid dehydration the loss is from the extracellular compartment and the need is for fluid and electrolyte replacement in this compartment. Hartmann's solution or a proportion of ⅔ isotonic sodium chloride and ⅓ sodium bicarbonate or ⅙ molar sodium lactate is better than the administration of normal saline solution alone. Vomiting means increase loss of chlorides and may require hypertonic saline.

One must beware of the chronic dehydrated patient who presents a normal hemoglobin, blood count and hematocrit. He may have a hemoconcentration with diminished blood volume to mask a chronic anemia and dehydration picture. This can be determined by blood volume determinations and where such determinations are not practical the thoughtful surgeon should have transfusions ready in anticipation of the patient's poor response to "surgical insult." He might also on these suspected cases "insult" them as little as possible.

POTASSIUM DEFICIENCY

A potassium deficit results in muscular atony and may be recognized by apathy, muscular weakness or paralysis, abdominal distention, adynamic ileus and tachycardia. Potassium deficiency postoperatively usually occurs between the fourth and seventh postoperative day and the clinical symptoms are accompanied by an alkalosis and a hypochloremia, usually with an acid urine.[21] This syndrome does not respond to sodium chloride but readily responds to administration of potassium salts either by mouth or parenterally. One also sees a low serum potassium with levels of 3 mEq. or less compared to a normal range of 3.6 to 5.5 mEq. per liter.

Treatment of potassium deficiency may be intravenous administration of potassium chloride or potassium phosphate in concentrations not to exceed 40 mEq. per liter and it must be remembered that there are three contraindications to giving of potassium: (1) the patient who is acutely dehydrated until rehydration is well under way, (2) in renal failure, marked oliguria or elevated nonprotein nitrogen unless the potassium level is known to be low, and (3) potassium should not be given the day of operation or the first twenty-four hours postoperatively unless the level is known to be low.

CHLORIDE DEFICIENCY

Primary chloride deficiency usually results from loss of large quantities of stomach fluids by vomiting or aspiration in which the chloride loss is in excess of sodium loss. The patient may develop tetany as a result of alkalosis due to loss of chloride. The treatment is to replace chloride such as sodium chloride solution or ammonium chloride. Darrow[15] has shown that potassium deficiency can result from alkalosis so this should be kept in mind in case there is a failure of response to chloride therapy.

PARENTERAL FLUIDS

One must not forget to evaluate the patient before determining the parenteral therapy. If the extracellular space is reduced as in dehydration, third space formation, the patient needs water and electrolytes, but if the extracellular fluid space is larger than normal due to cardiac failure, cirrhosis or diminished urinary output, a dilution of electrolytes results with low values and an attempt to give electrolytes will likely aggravate the condition by expanding an already overexpanded space.

A serum sodium below 125 mEq. per liter requires immediate correction as shock is likely to develop if the sodium level falls below 120 mEq. per liter. Serum chloride requires replacement usually when the level falls to 85 mEq. per liter and bicarbonate when it is below 15 mEq.

A table of commonly used parenteral fluids is taken from Henry Randall's[9] article.

TABLE 3

ELECTROLYTE CONTENT OF 1 LITER OF INFUSION FLUIDS (mEq.)

	Na	*K*	*Cl*	*Effective HCO2*
Sodium Chloride 0.9%	154	0	154	0
M/6 Sodium Lactate	167	0	0	167
Sodium Bicarbonate 1.2%	143	0	0	143
Ammonium Chloride 0.75%	0	0	140	0
Dextrose in Water	0	0	0	0
Potassium Chloride Ampules in 10 cc., 1.59 gm.	0	20	20	0
Special solutions				
Hartmann's Solution (Ca++ 3.6 mEq.)	136	5.3	112	33
Darrow's Solution	120	35	105	50
Sodium Chloride-Potassium Chloride (Mudge)	110	30	140	0
Potassium Chloride (2.23 Gm.) in Water, 5% Dextrose	0	30	30	0

To make it sound easy would be to pick the proper solution to replace the primary electrolyte deficiency. It must be remembered that parenteral therapy is temporary and always second best to the gastrointestinal tract as an avenue to replace electrolytes, water and food elements.

SUMMARY

The most logical approach to the problem of intestinal obstruction is to take the time tried precepts of careful evaluation of the patient as an individual, to determine his problems by careful history, physical examination and laboratory study and correlate these with present day knowledge of fluid and electrolyte balance.

An understanding of fluid compartments and their electrolyte contents and shifts as well as a knowledge of the clinical laboratory variations that accompany these shifts is vital. The general health of the patient, the rapidity of the changes as well as a knowledge of variations such as "the third compartment," are basic surgical considerations that will help reduce the mortality rate for statistics of the future.

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Renal Disease

Water and Electrolyte Changes

MICHAEL M. KARL, M.D., *St. Louis*

IT IS NOT THE purpose of this discussion to present details of renal physiology, but it seems pertinent, in order to understand some of the principles of electrolyte and water balance in renal disease, to review briefly some of the renal mechanisms that are important in water and salt balance.

It is known that the renal blood flow, which measures about 25 per cent of the cardiac output, or 1,200 cc. per minute, may be definitely reduced in various types of renal disease, either by vasoconstriction as in hypertension, or by inflammatory changes in the vessels themselves such as take place in glomerulonephritis or in pyelonephritis. A second important factor in controlling water and salt in renal disease is the glomerular filtration rate, which is approximately 180 liters in a twenty-four hour period. So enormous is this amount of filtrate that if glomerular filtration continued without reabsorption, it is apparent that the body stores of water and salt would be depleted in a short time.

However, a third important factor, that of tubular reabsorption, intervenes. The tubules influence salt and water in various ways. The proximal tubules reabsorb water, glucose, sodium, potassium, phosphates, sulphates and part of the chlorides. The distal tubules play an important part by further absorbing some of these substances, but do it selectively against an osmolar gradient. It is this function of selective reabsorption that is most important in determining the concentration of these factors in the urine, thus stabilizing salt and water in the plasma. In addition, the distal tubules play an important part by excreting hydrogen which they obtain from the carbonic acid of the plasma and by manufacturing ammonia. They may also at times excrete creatinine. This function of excreting hydrogen and manufacturing ammonia is most important for the conservation of body sodium, because ordinarily the tubules exchange hydrogen for sodium and manufacture ammonium which combines with body acids for excretion, body acids that might otherwise take up supplies of sodium.

These three factors are in constant balance, but in renal disease they may be altered in a number of different ways. The glomerular-tubular balance may be altered proportionately, or one may selectively outbalance the other. Because of these many variations, the problems of salt and water balance encountered in renal disease are entirely individual ones. One cannot, therefore, use any rule of thumb in correcting any of the deficits that may occur. It might be helpful to mention briefly some of the alterations that take place and discuss some of the repair solutions that are necessary to correct these alterations.

In hypertonic dehydration, there is an increase in sodium and chloride concentrations, brought about by polyuria that may occur in kidney disease, and by the inability of the diseased kidney to concentrate urine. The result is a hypertonic plasma. In an effort to regain its isotonicity, the extracellular fluid compartment will pull water out of the cells, making them markedly dehydrated. The only therapy that is necessary to correct this hypertonic dehydration is the administration of excessive water, usually in the form of 5 per cent glucose in water.

In certain conditions, such as "salt losing" nephritis, a state of hypotonic dehydration in which the concentrations of sodium and chloride in plasma are reduced, is produced, since salt is lost out of proportion to water. In an effort to maintain its isotonicity, water passes from the extracellular fluid compartment to the cells and by doing so reduces the plasma volume. Attendant with this are all the features of shock that accompany reduction of plasma volume. The correction of this alteration is carried out by the administration of hypertonic sodium chloride in concentrations of 3 to 5 per cent. If isotonic sodium chloride is administered, the extracellular fluid compartment will be increased without appreciably altering the hypotonicity of the fluids.

In certain renal diseases, edema is produced, with an increase in the volume of water in the extracellular fluid compartment, but without any alterations in the sodium and chloride concentrations. The correction of this condition is carried out by the use of the conventional means of excreting sodium. These consist of mercurial diuretics, low salt intake, acidifying and causing a temporary acidosis by use of such salts as ammonium chloride. Cation exchange resins are used to absorb sodium from the intestinal tract.

One of the alterations that may take place characteristically in renal disease is the production of acidosis as a result of the tremendous loss of sodium. Sodium may be lost because the damaged tubules cannot reabsorb the large amounts of sodium that are brought to it by the glomerular filtrate, as demonstrated in a diagram from Gamble (fig. 1).

It is noted that the amount of water that is excreted is only about 1 per cent of the filtrate. The quantity of sodium is perhaps a little less than 1 per cent. In renal disease in which tubular reabsorption is interfered with, however, large quan-

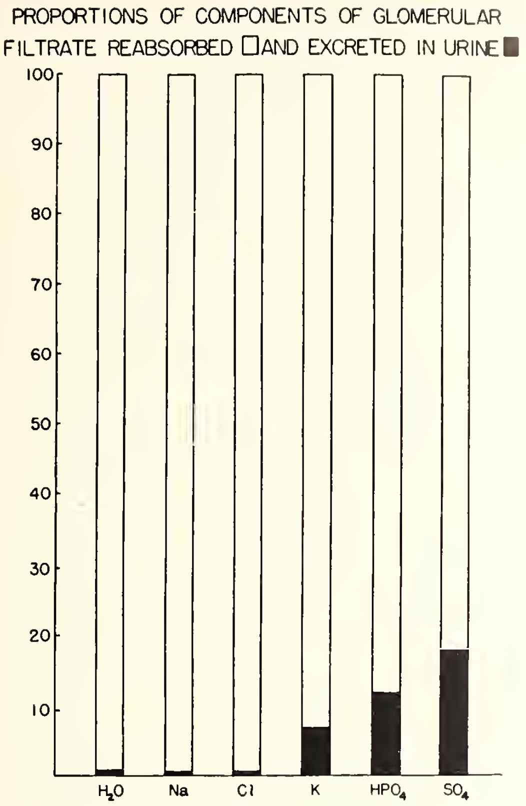

Fig. 1. (From Gamble.)

tities of sodium are excreted because the tubules cannot reabsorb the usual amount. One mechanism by which acidosis is produced, then, is the failure of the tubules to conserve sodium by reabsorption.

Another way that sodium may be lost is the inability of the diseased tubules to manufacture hydrogen that normally is exchanged for sodium. More sodium, then, must be excreted to take the place of this hydrogen. The third mechanism is the inability of the tubules to manufacture ammonia which might spare sodium. Acidosis is produced by this great loss of fixed base which excretes with it large amounts of chlorides and bicarbonate.

Acidosis is best corrected by the administration of repair solutions that contain large quantities of sodium. One must be careful about the administration of excess sodium, however, since some may pass from the extracellular to the intracellular compartment which normally contains little sodium. In doing so, it may displace a considerable amount of potassium from the cells into the extracellular fluid. What happens to this potassium will, of course, depend on the function of the kidney. If the urine output is good, large quantities of the potassium displaced from the cells will be excreted, producing a state of hypokalemia with all of its usual clinical features. If oliguria or anuria is present, this displaced potassium remains in the extracellular fluid compartment and produces all of the dangerous symptoms of hyperkalemia.

In correcting acidosis, one must be careful about giving excess sodium in the presence of a potassium deficit. If sodium without potassium is administered in such states acidosis connot be corrected. The repair solutions that are commonly used to correct acidosis in renal disease are those that contain an excessive amount of sodium ions. These usually are mixtures of sodium lactate and glucose in saline. For example, a liter of fluid containing one third of one sixth molar sodium lactate and two thirds 5 per cent glucose in saline will contain about 150 milli-equivalents of sodium, and about 100 milli-equivalents of chloride. If a potassium deficit is present, to this liter of fluid may be added as much as 60 milli-equivalents of potassium.

Should it be desirable to give sodium in excess of chlorides, this solution may contain half one sixth molar sodium lactate and half 5 per cent glucose in saline. This will supply about 150 milli-equivalents of sodium, and about 75 milli-equivalents of chloride. Here, too, if there is a potassium deficit, 40 or 60 milli-equivalents of potassium may be added. In severe acidosis one sixth molar lactate may be used, which is isotonic and has 150 milli-equivalents of sodium without any chloride. In giving this solution, one must be cautious about supplying so much sodium that it passes from the extracellular fluid compartment to the cells, thus causing a potassium deficit. Any of these repair solutions may be used to correct the acidosis in renal disease, depending on how much sodium and how much chloride is necessary.

With the loss of sodium there is also some concomitant loss of chloride and bicarbonate. In an effort to make up the anion deficit in renal disease, there is an increase in phosphates and an increase in sulphates. This is accomplished because these substances are brought to the tubules for reabsorption in reduced amounts by a decreased glomerular filtrate. In addition, sulphates are produced in excess in renal disease by the breakdown of proteins, and, phosphates are produced in excess in renal disease by the breakdown of organic phosphate.

Figure 2 shows the changes mentioned that take place in renal disease. First is a case of nephritis with relatively mild involvement, while the last column shows the changes in terminal nephritis. The base column is decreased because of the loss of sodium, the bicarbonate anion is decreased in quantity and the chlorides are low. The increase in the R column is due to the increase in phosphates mentioned previously, the use in sulphates, and the increase in organic acids. There may also be some small alteration in proteins. In any event in renal disease as the bicarbonates and chlorides decrease, the phosphates and sulphates are markedly increased.

The cation potassium may be altered considerably in renal disease in a number of different ways. Since potassium is excreted in such large quantities in the urine, oliguria or anuria may increase

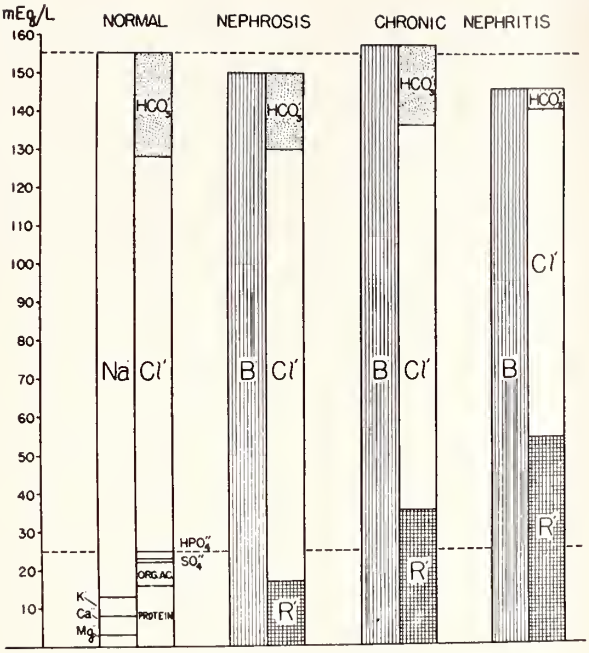

Fig. 2. (From Gamble.)

markedly the amount of potassium in the plasma. It is known that this is one of the great dangers in advanced renal disease. In certain situations in which tubular absorption is interfered with out of proportion to the changes in glomerular filtrate, the potassium actually may be lost in great quantities, resulting in "potassium losing" nephritis. These alterations may be corrected by the administration of potassium.

Calcium is usually low because of the antagonistic rise in phosphates mentioned before, and also because usually in renal disease intestinal absorption of calcium is greatly interfered with. This low level may be significant because under certain conditions tetany may be produced, requiring the administration of calcium. It is interesting to point out that tetany will not be produced even with low calcium levels if a potassium deficit is present. If potassium is given in order to correct such a deficit, tetany may be produced with the administration of potassium.

It might be of interest to discuss briefly the changes that take place in acute renal failure, such as the "lower nephron" syndrome, a syndrome that actually involves the whole nephron. This is of interest not only to the internist but also to the surgeon who sees it in shock states and severe burns. It is of interest to the urologist who sees it occasionally after cystoscopy, and to the obstetrician who sees it in toxemias of pregnancy. Regardless of the etiology of this poorly named "lower nephron" syndrome, the mechanism and repair are probably one and the same. It is felt that acute renal failure develops because of marked vasoconstriction of the renal vessels. Because of this marked vasoconstriction, the blood supply to the tubules which is carried on through the efferent arteriole is so markedly interfered with that ischemia develops. When the tubules become bloodless, they behave like a dead membrane or a dead cell. The glomerular filtrate brought to the tubules, instead of being selectively reabsorbed, is reabsorbed completely. When this occurs, there is of course no urine output and the patient is anuric. The changes that take place are anuria, a rise in blood urea, a rise in creatinine, sulphates, phosphates, uric acid and potassium.

It is particularly important in this situation to have a proper understanding of what changes take place and what repair solutions are proper because this condition need not have the poor prognosis of a few years ago. With proper handling, many patients with anuria may now be brought back into good renal balance, depending of course on the underlying situation that produces their renal failure. In this syndrome, if the patient is not vomiting and if plasma electrolytes are not altered by injudicious use of fluids and salts, the concentration of sodium and chloride in the plasma is fairly normal. If the patient vomits, this may be altered. The threats presented in the lower nephron syndrome are, first, the accumulation of potassium and, second, the accumulation of urea products with ultimate death in uremia. Until recent years, most doctors who encountered this situation followed the old precept that kidneys that do not function properly must be "flushed" with large quantities of parenteral fluids. Invariably these patients died in pulmonary edema in a week or ten days. It is known that patients who died from uremia years ago before parenteral fluids were available lived from three to eight weeks. With the advent of fluids and with the idea that one must flush out these kidneys to get them working, many such patients died from pulmonary edema within a few days because the circulatory system was overloaded.

The important principle to follow in managing the "lower nephron" syndrome is that only enough fluid must be given to make up the so-called insensible water loss through the skin and the feces. In a normal individual, this averages 600 to 800 cc. but in a patient who has high fever this amount may be as high as 1,000. The principle to follow in replacing water in a patient who is anuric is to give approximately 600 to 800 cc. of fluid per day to make up the insensible water loss —and no more. Recent studies on water formation from endogenous tissue breakdown indicate that even these small quantities may be excessive. If the patient is putting out some urine, add to this amount the volume excreted in the urine.

What repair solution should be used? When the electrolyte concentration is normal, all that should be replaced is water containing enough salt for the volume of fluid given. A useful preparation is 10 per cent glucose in water. It has been shown that in order to spare body breakdown of nitrogen, a patient should receive 100 grams of glucose a day. If the total intake is limited to 1,000 cc., 10 per cent glucose will make up the necessary 100 grams of glucose per day. If 10 per cent glucose is given for any length of time, it is known that a normal concentration of sodium and chloride may be changed to hypotonic concentrations in the plasma. To avoid this, a solution made up of two thirds glucose in water and one third normal saline may be given. Normal saline solution contains 150 milli-equivalents of sodium and 150 milli-equivalents of chloride per liter, so that in this proportion 50 milli-equivalents of each per liter of water will be given. This may replace the small amounts of sodium and chloride that are lost from perspiration.

One of the dangers in acute renal failure is the accumulation of potassium. There have been various methods used to try to keep the potassium level down. The artificial kidney is helpful, but requires the use of a highly trained team in constant attendance on the patient on whom it is being used. Administration of glucose will push potassium from the extracellular fluid into the cells. Insulin will do likewise, and there is now some evidence that testosterone proprionate may be of value. Since the peritoneum is a diffusing membrance, flushing the peritoneal cavity with a solution of electrolytes that is free from potassium may be helpful. In an effort to maintain isotonicity, potassium will be pulled out of the extracellular fluid. Intestinal lavage may do likewise. All of these measures have been used, but none with an astonishing degree of success, except in perhaps the artificial kidney. One must point out that in renal failure, the rise in potassium may be accentuated if solutions with excessive amount of sodium are given.

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Potassium Metabolism

MICHAEL M. KARL, M.D., *St. Louis*

IN RECENT YEARS, much has been written about the role of potassium in various metabolic processes that take place within the body. A vast amount of information has been added to that knowledge since the introduction of the flame photometer, but there still remain a great many gaps in the knowledge and understanding as to what actually takes place when potassium enters and leaves the body.

To emphasize the importance of this cation in the body, it might be wise to mention a few figures that have been established and verified in the past. The total amount of potassium in the body varies between 3,500 and 4,800 milli-equivalents in various studies reported. Of this amount, only 60 or 70 milli-equivalents are present in the extracellular fluid compartment, the remainder making up the principal cation in the intracellular compartment. It has been estimated that from 70 to 100 milli-equivalents of potassium are ingested daily. For all practical considerations, all of this is excreted, 10 per cent in the feces and 90 per cent in the urine.

The concentrations of the various electrolytes in the fluid compartments of the body are illustrated to show their relationship to potassium (fig. 1).

There are a number of clinical states in which alterations in the potassium content are known to occur. These are summarized as follow:

I. Hyperkalemia
    1. Increased intake
    2. Renal insufficiency
    3. Oliguria or anuria
    4. Tissue breakdown, as in malnutrition, dehydration, or infection
    5. Untreated diabetic acidosis
    6. Anoxia
    7. Decreased extracellular fluid volume, as in dehydration
    8. Adrenocortical insufficiency

II. Hypokalemia
    1. Decreased intake
    2. Excessive diuresis
    3. Vomiting or diarrhea
    4. Treated diabetic acidosis
    5. Postoperative states (starvation and Wangensteen suction)
    6. Increase in extracellular fluid volume by potassium free fluids
    7. Renal disease ("potassium losing" nephritis)

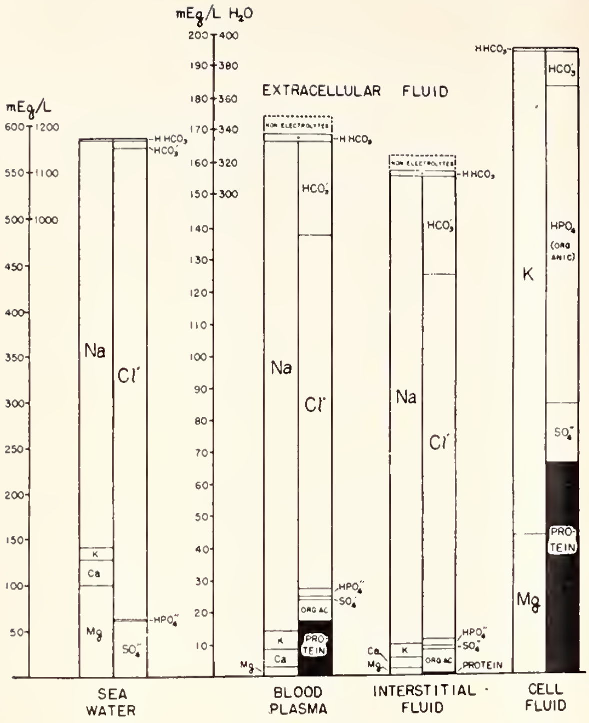

CHART 2

Fig. 1. (From Gamble.)

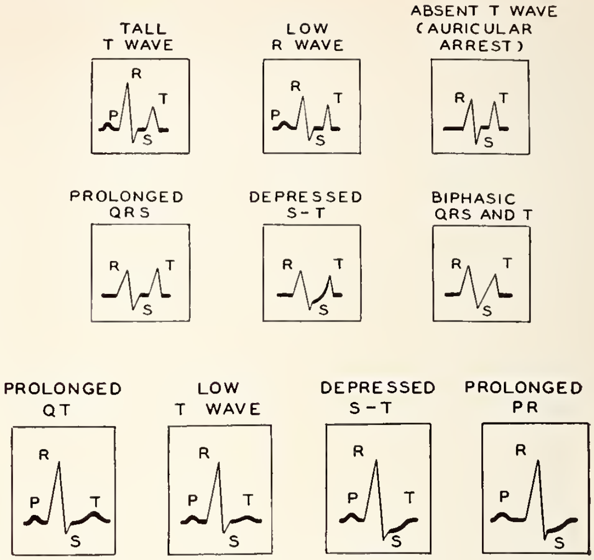

Fig. 97.- The effect of low serum potassium on the electrocardiogram.

Fig. 2. (From Lippman and Massie.)

8. Cortisone and ACTH
9. Alkalosis
10. Shock

Deviations from the normal range of potassium in any of these states may produce definite clinical signs and symptoms. Hyperkalemia has been known to produce (1) restlessness, (2) mental confusion, (3) flaccid paralysis, (4) numbness and tingling and (5) peripheral vascular collapse. Most important, however, are the cardiac manifestations which may begin with electrocardiographic changes illustrated in figure 2 and progress to various degrees of heart block and ultimate cardiac arrest in diastole.

Common signs and symptoms of hypokalemia include (1) weakness, (2) drowsiness, (3) dyspnea with gasping respirations, (4) anorexia and nausea, (5) abdominal distention culminating in paralytic ileus, (6) edema, (7) oliguria and (8) cardiac enlargement and failure. The electrocardiographic changes are likewise summarized in figure 2.

From the preceding discussion, it is readily apparent that alterations in the normal potassium content of the body may produce serious consequences and should be corrected as soon as detected. First and foremost in the measures available to diagnose these abnormalities is an awareness of clinical states in which potassium alterations may be present. These have been mentioned previously. The use of the flame photometer to detect changes in the serum and the electrocardiographic signs likewise have been mentioned. Unfortunately, changes in the serum and electrocardiogram may not always be parallel, so that whenever possible it is wise to follow a patient's potassium metabolism with both.

Hyperkalemia may present a difficult problem to treat. The artificial kidney, which unfortunately is not generally available, may lower serum potassium by dialysis. The same principal has been used in intestinal and peritoneal lavage with some success. Potassium free cation exchange resins have been used for this purpose, although they may be dangerous by producing uncompensated acidosis when renal damage is present. A number of measures are at least theoretically indicated because they either cause retention of potassium within the cells or actually aid transfer of potassium from the extracellular space to the cells. These include the administration of glucose, insulin, sodium and testosterone.

The correction of hypokalemia implies a proper knowledge of the type of potassium solution indicated, the amount and concentration needed, and the speed of administration. Commercial preparations of potassium chloride or buffered potassium phosphates are available, usually containing 30 milli-equivalents per ampule. Likewise available are preparations which simulate the electrolyte concentrations of stomach and intestinal juices for use in postoperative states. Summarized in figure 3 are various repair solutions proposed by authorities in the field of potassium metabolism.

It has been stated that potassium must not be administered in concentrations greater than 70 to 80 milliequivalent, nor at a rate greater than 20 milli-equivalent per hour. In the face of renal

Solutions for the Parenteral Administration of Potassium

	Solution and Indication	Salt	Concentration of Salt	Cl	Na	K	Na+K
			(Gm./L.)	(mEq./L.)			
A	For infant diarrhea with acidosis (Darrow)	KCl	2.7	35	—	35	—
		NaCl	4.0	69	69	—	—
		$NaHCO_3$	4.4		53	—	—
		———	—	101	122	35	157
B	For infant diarrhea with acidosis* (Butler)	KCl	0.9	12	—	12	—
		K_2HPO_4	0.3	—	—	3	—
		NaCl	0.6	10	10	—	—
		Na lactate	2.2	—	20	—	—
		———	—	22	30	15	45
C	For K deficiency with alkalosis† (Elkinton)	K_2HPO_4	3.2	—	—	37	—
		KH_2PO_4	0.7	—	—	5	—
		KCl	3.0	40	—	40	—
		NaCl	4.2	72	72	—	—
		———	—	112	72	82	154
D	For K deficiency (Tarail)	K_2HPO_4	1.5	—	—	53	—
		KH_2PO_4	1.0	—	—	7	—
		NaCl	5.5	94	94		—
		———	—	94	94	60	154
E	For K deficiency (Elkinton)	KCl	6.0	81	—	81	—
		NaCl	4.3	73	73	—	—
		———	—	154	73	81	154

* Make up potassium in 10 percent glucose solution.
† Make up salts in 900 ml. distilled water and autoclave, then add 100 ml. of 50 percent glucose to make 1 liter.

Fig. 3. (Reproduced with permission of the Eli Lilly Co.)

failure, potassium must of course be given with great caution.

No discussion on potassium should overlook the syndrome of hypochloremic alkalosis, such as develops in excessive vomiting of pyloric obstruction, or postoperatively in patients with Wagensteen suction. Here, because of excessive loss of chloride over sodium, alkalosis develops, sodium remains normal or only slightly low and chlorides drop to low levels. Serum potassium levels are usually low in this state. Darrow has clarified the relationship between sodium, potassium and bicarbonate in the body, pointing out that the production of alkalosis produces an exodus of potassium from the cells into the plasma and that the kidneys excrete potassium at an accelerated rate. Simultaneously, sodium moves from the plasma into the cells to replace the potassium loss. As much as one half of the intracellular potassium may be replaced by two thirds of an equivalent amount of sodium. These relationships are demonstrated in a patient studied at the St. Louis City Hospital (fig. 4).

In hypochloremic alkalosis, the serum calcium is also low. Of practical importance is the fact that tetany may occur with the administration of potassium unless calcium is given simultaneously. Likewise, it should be stressed that an attempt to correct hypochloremic alkalosis by the administration of hypertonic sodium chloride or ammonium chloride without potassium not only will be unsuccessful but may actually potentiate the condition by accelerating the sodium-potassium transfer between cells and serum and by increasing urinary excretion of potassium.

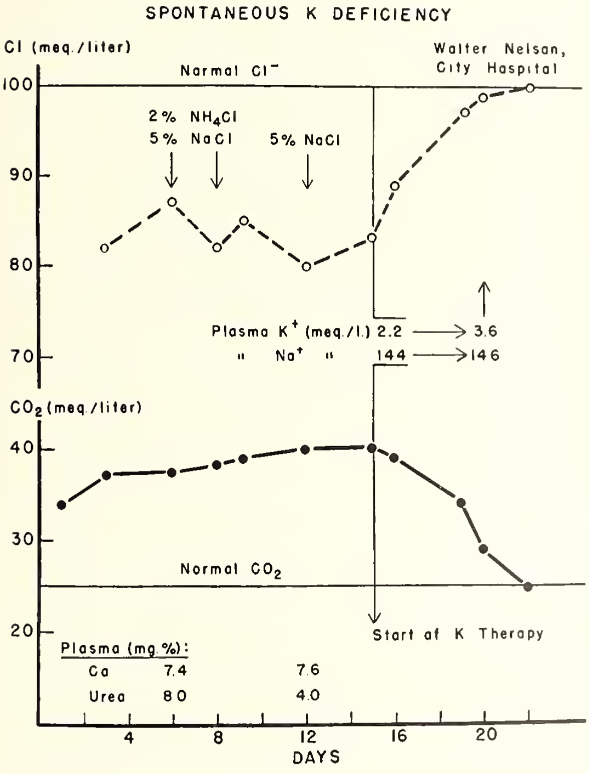

Fig. 4

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Balanitis Xerotica Obliterans

or Kraurosis Penis

E. L. POLLOCK, M.D., *St. Louis*

THIS DERMATOLOGIC genitourinary entity was first described by Stuhmer in 1928. He thought that it occurred in young individuals and that it followed circumcision or a dorsal slit of the penis.

Dr. A. G. Frank reported a case that he saw that had been present for five years. The conclusions that he came to were that this dermatologic condition is infrequent both in genitourologic and dermatologic cases. He also noted that a narrowing or stenosis of the urethra might occur. In Dr. Frank's case the etiology was unknown; however, it did follow circumcision.

Hyperkeratosis and atrophic dermatitis are the main findings microscopically. Along with these findings, there usually coexists a mild narrowing of the meatus and urethra. Fruwald and Grutz, who have reported six cases, have found malignant chances in some of their cases.

REPORT OF CASE

On September 11, 1953, A. B. J., aged 40, came to my office and his chief complaint was that he had something wrong with his penis stating "It hurts me whenever the wife and I have coitus, and it bleeds frequently." No history of circumcision was given.

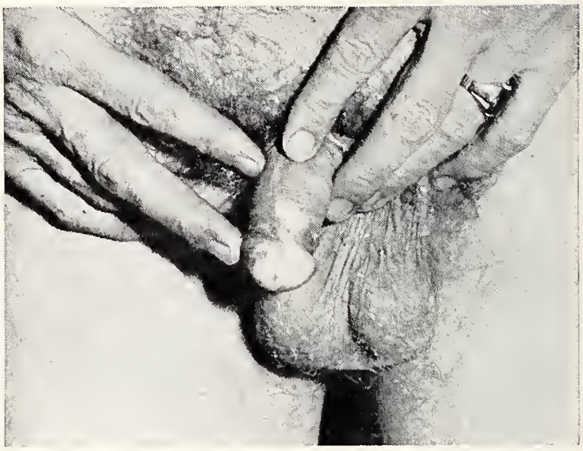
The patient had been hospitalized in May 1953, at Incarnate Word Hospital because of a gastrointestinal disturbance; this workup was negative. His history was interesting because of probable (1) pulmonary sarcoidosis or possible (2) fungus infestation of the lung.

Following the patient's complaint that there was something wrong with his penis, I had him strip and I examined him. On the inferior aspect of the glans penis there were two areas, to the left and right of the urethra. These areas were white and waxy in appearance but there were also several small petechiae or lesions about the same area which were "flea bite" in appearance. On further questioning as to the past history he stated that this had been present since he was 15 years of age but he being reticent about the matter had not gone to a physician because of it.

Suspicious of the lesion and its multiple possibilities, I presented him to a group of staff doctors. The pathologist, Dr. F. J. Compos, thought of the possibility of erythroplasia of Queyrat. It was agreed by all present that the only solution was a biopsy. This was done a few days later and the specimen was removed in my office under local anesthesia. The tissue was sent to Clinical Laboratories for tissue study.

Report of Pathologist: The gross specimen consists of a small bit of tissue, measuring 8 by 3 mm. in size. All of the material received was taken for serial section. Also received were two friable bits of grey tissue, each measuring 2 mm. in greatest dimension.

Microscopic examination reveals a thin layer of keratin. Underneath this there is a layer of epithelium which is atrophic and thin and has lost the normal dipping of the pegs into the connective tissue. The connective tissue shows marked atrophy with hyaline degeneration. Just beneath the epithelium in some areas there are numerous dilated capillaries almost resembling a hemangioma. The spaces are filled with red blood cells. The basement membrane in all of the section appears intact and there is nothing in the sections to suggest a malignancy or erythroplasia of Queyrat. Histologically this lesion is almost identical with the lesion found in kraurosis of vulvae and is known in the male as kraurosis penis or balanitis xerotica obliterans. This type of lesion represents a chronic progressive atrophic sclerosing process of the glans and prepuce which frequently eventuates in urethral stenosis.



Diagnosis: Balinitis xerotica obliterans.

Since this case was reported earlier this year, another case was reported by H. K. Turley and John L. Shaw in the April 1954 *Journal of Urology.*

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I wish to thank Dr. F. J. Campos and Dr. Donald B. Frazier, pathologists, and the laboratory staff for their collaboration in the diagnosis and treatment of this report.

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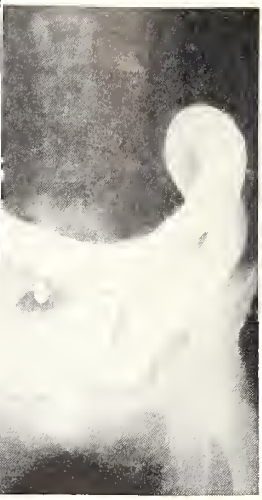

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SEARLE

Postgraduate Review

Pulmonary Lesions in Closed Injuries of the Chest

R. D. DUNCAN, M.D.; T. E. FERRELL, M.D., and D. F. GOSE, M.D., *Springfield*

THE PURPOSE of this paper is to consider pulmonary lesions that occur with closed injuries of the chest and to review five cases which we feel emphasize the necessity of radical surgery in the treatment of the severe injury. It is felt that without adequate and prompt surgical intervention these cases all would have resulted in fatality. In association with this discussion, it is also wished to emphasize the importance of tracheotomy in the treatment of chest injury.

There are a number of etiologic factors to be considered in chest injuries, particularly of the closed type. The chest and rib cage is a fairly rigid structure, but has many elastic qualities. For this reason an intrathoracic injury can occur with little external evidence of the injury. The chest is covered by rather thick muscular structures in front and muscular and bony structures in the back and in women the breast often will mask any chest deformity. Injuries that cause a laceration of the lung or damage to the chest structures must be quite severe because of the protection afforded the intrathoracic structures. This is borne out by one of our cases in which a portion of rib and intercostal muscle bundle was knocked completely loose and driven into the lung without an open injury. Another one of our cases involved a large laceration of the lung with tension pneumothorax, while another involved a rupture of the diaphragm with stomach, colon and spleen driven completely into the chest. Another case involved a bronchial rupture with mediastinal and subcutaneous emphysema. In association with this type of injury, several other etiologic factors must be considered as playing a part in the injuries. These are disturbed physiology of the chest and pulmonary ventilatory system that occurs following the splinting of the chest because of pain following the introduction of blood, fluid or air into the pleural cavity, and from the severe reflex disturbances that are set up as a result of a shifted or shifting mediastinum.

The pathology in a severe injury of the chest may take a number of different forms. Pneumothorax following a nonpenetrating injury is often present and usually involves a severe laceration of the lung and is characteristically of the tension type. A tension pneumothorax requires immediate treatment if the patient is to survive. Two of our cases illustrate this. The immediate treatment is aspiration. This is followed by the insertion of a thoracotomy tube with the end placed under a water seal. This thoracotomy tube has a value in other ways. Often, in association with pneumothorax, there is an effusion or hemothorax that requires care. The effusion must be treated as it causes compression of the lung, shifting of the mediastinum and interference with the respiratory function. In addition to this, with a laceration of the lung, an effusion is potentially infected.

A hemothorax requires similar care and has the same physiologic dangers. Thus, the thoracotomy tube serves two purposes. It allows effused blood to be removed and allows air under pressure to escape, thus permitting the lungs to expand. We do not feel that the thoracotomy tube should be attached to negative pressure, but that a water seal is adequate. Neither do we feel that a thoractomy tube used in this manner exerts enough pull nor enough negative pressure to maintain an open fistula or a continued pneumothorax. If there is a lung laceration sufficiently large so that one cannot remove the air rapidly enough to allow the normally elastic lung to expand, one should know this and can know this by observing the reaction of the patient and the drainage of the thoracotomy tube. In such a case we feel that open surgery is indicated, as it is only by bringing the lacerated lung against the chest wall that one can again make the chest air tight. To use negative pressure, intermittent suction or to practice delay in the use of a thoracotomy tube, as is sometimes advocated, we feel will not prevent further effusion or hemorrhage or allow the bronchial opening to close, but often will result in a fibrous, nonexpandable lung that will require further major surgery.

The rapid expansion of the lung by removal of pleural impediments will stop hemorrhage, effusion and pneumothorax and the further complications of empyema or a nonexpandable lung. Whenever a lung laceration occurs, infectious material is introduced into the chest cavity. To avoid subsequent trouble, the pleural space must be kept normally closed. With a severe laceration of the lung, a bronchial or tracheal injury may be so large that one cannot keep the lung expanded by means of aspiration or the tube. Thus, the use of aspirations or a water-tight thoracotomy tube is not always sufficient. In such an instance, it is imperative that an open thoracotomy be done and a bronchial or parenchymal repair carried out, which should be followed by the use of suction to the pleural space or the use of a water-seal thoracotomy tube.

Not infrequently in severe closed injuries of the chest a bronchial or tracheal rupture will occur. The chest, being a closed cavity and being struck suddenly, may result in a rupture or blow-out at a small area in the bronchial tree, or even in the trachea. This is particularly true if there has been previous disease or if there is a localized area of disease or a defect present. The secretion from these bronchi, of course, contains bacteria and we feel that an open repair should be done whenever necessary. This, preferably, should be done before an infection sets in; that is, by or before the fourth day of treatment. The patient with such severe chest injuries often may have other associated severe injuries and one should evaluate the patient's status and be careful regarding thoracotomy and chest aspiration. In one of our cases there was complete herniation of the stomach through the diaphragm with volvulus and dilatation of the stomach. Chest x-ray was reported as a hydropneumothorax. It would have been easy to aspirate or put the thoracotomy tube into the stomach through the chest wall. This same case at surgery was found to have a ruptured spleen and some bleeding points on the colon and omentum which needed ligation. This emphasizes the point that when other injuries are present one can explore the upper abdomen through the diaphragm if it is necessary to do an open thoracotomy.

Chest injuries, when severe, upset the patient's entire breathing mechanism and pulmonary physiology. They are painful and thus limit the excursions of the chest and the cough reflex. They interrupt the normal negative intrapleural pressure. Often they cause a mediastinal shift and thus bring about various reflex disturbances. With a collapsed lung the breathing capacity and tidal air is reduced. A mediastinal emphysema may occur and cause direct pressure on the trachea, bronchi or root of the great vessels and cause reflex disturbances in the heart and cardiovascular system. Edema of the lung may occur. Subcutaneous emphysema frequently results and may interfere mechanically with breathing. In some of these patients the use of a tracheotomy may be life saving, in addition to the local measures used. A severely injured person cannot cough up or get the normal secretions of the bronchial tree past the barrier of the larynx. When these secretions are increased by edema or the admixture with blood and the viscosity is increased by shock and dehydration, the removal of these by the usual cough reflex is impossible. An intratracheal aspiration by the oral route at infrequent intervals, or even at frequent intervals, is not sufficient. The frequent and repeated aspiration of these secretions through a well open tracheotomy tube is sufficient to keep the bronchial tree clear. It is dramatic to see a patient *in extremis* with a "death rattle" clear up and recover following a bedside tracheotomy and insertion of a tracheotomy tube. The amount of secretions is often quite large.

In addition, it can be shown by physiologic studies that a tracheotomy may reduce the "dead" space in the respiratory passages by 50 per cent or more, and thus allow the tidal air to be decreased in amount and still provide adequate oxygenation. This, in addition, allows a decreased breathing effort and, therefore, a lesser degree of respiratory excursions of the chest and less pain. In other words, this may convert an insufficient respiratory effort to an adequate effort. Three of the cases reported here required a tracheotomy and in each it was felt to be a life saving procedure.

A mediastinal emphysema may be decompressed at the same time that a tracheotomy is done by separation of the deep layers of fascia in the neck and the insertion of drains. A check for mediastinal emphysema may be done by aspiration of the chest through a needle inserted just to the right of the sternum in the second or third interspace with the needle angled inward toward the center. One of our patients had a marked mediastinal emphysema and on opening the pretracheal fascia during the insertion of the tracheotomy tube, air could be heard to escape through the wound.

If there is a delay in the expansion of the lung, a number of complications can occur. The thoracotomy tube may not be adequate for the treatment of a large laceration of the lung or a bronchial or tracheal rupture. If open thoracotomy is delayed, the material in the pleura, usually consisting of blood, effusion and, perhaps, rib fragments or other debris, will cause an infection to develop. With the development of an empyema there may be a bronchopleural fistula. This complication requires open surgery. The ideal treatment of this delayed complication would involve the removal of the septic material, suture of any fistula and the removal of any thickened, fibrous material which has developed over the visceral and parietal pleura. This would be done by the usual decortication procedure. A decortication is a rather extensive procedure, but quite satisfactory, particularly when the lesion has not been allowed to exist for too long a period of time. Foreign bodies which are present in the pleural cavity should be removed by open surgery. A severe laceration of the lung in which an adequate decortication cannot be done or would be insufficient may require pulmonary resection of the involved lobe or area. A long standing empyema may respond to decortication but, in a few instances, thoracoplasty or a Schede procedure may have to be done in order to clear the infected pleural space. The latter procedures, of course, limit the expansion of the lung and leave the patient with a permanent defect. To avoid this we feel that an adequate scheme and course of procedure should be carried out in all severe chest injuries of the character considered here.

CASE REPORTS

Case 1. G. B. This patient was admitted to the hospital by ambulance in a state of severe shock following an injury when he slipped on ice and fell under a moving oil truck which passed over the upper part of his body. On entrance to the hospital the patient was bleeding from the nose and mouth and there was marked deformity of the head with an apparent crushing injury and lacerations. There was a definite skull fracture. The head and neck were twisted to the left and flexed in that direction. There was some bruising of the shoulder and right chest. The diagnoses following examination and x-ray were as follows: (1) basal skull facture with displacement; (2) fracture of the orbital, zygomatic, maxillary and mandibular bones; (3) compound fractures of the left temporal region; (4) fracture of the right costocartilages; (5) severe contusions with crushing and avulsion of the right brachial plexus with complete sensory and motor paralysis of the right arm; (6) severe contusions of the right shoulder, right elbow, left wrist and of the head; (7) right facial paralysis, and (8) severe traumatic shock.

Shortly after being put to bed the patient developed a massive subcutaneous emphysema and on examination was found to have a mediastinal emphysema and tension pneumothorax on the right. The patient's condition was poor and he was not moved from the bed where he had been receiving oxygen therapy. A thoracotomy tube was inserted into the right chest through the sixth mid-axillary interspace and placed under a water seal. Needle aspiration of the right side of the sternum revealed a marked mediastinal emphysema and approximately 600 cc. of air was removed by needle. There was a deviation of the trachea to the left. The patient improved somewhat following this procedure, but had considerable difficulty in breathing and was unable to cough secretions from his chest or throat. A tracheotomy was done with the patient in bed, at which time the fascial structures were opened down to the superior mediastinum, allowing the air to escape. The patient immediately improved and on repeated aspiration through the tracheotomy tube progressed satisfactorily so that his other injuries could be treated. He was injured on January 17, 1953, and at the present time (June 1954) has no pulmonary disability or defect. He has residuals from his other injuries, but no residuals from his pulmonary lesion. It was felt that he had a small lung or bronchial laceration at the time of injury.

Case 2. R. B. The patient is a 22 year old white female who was seen at the hospital following an autombile accident. She entered the hospital in shock and with obvious respiratory difficulty. Examination and x-ray revealed multiple rib fractures, but the patient did not have the typical "flapping" sternum or paradoxical breathing, although there was a suggestion of this. She was in a great deal of pain, had a marked subcutaneous emphysema which was increasing in severity, was unable to cough up secretions and developed a marked "rattling" in the throat within several hours time. There was no hemothorax or pleural effusion. Aspiration of the chest did not reveal air or fluid. It was felt that the patient had a bronchial rupture with a mediastinal emphysema and resultant subcutaneous emphysema. After watching the patient for a period of time it was felt that tracheotomy might offer some help. The tracheotomy was then done with the patient in bed, at which time a mediastinal decompression through the supraclavicular area was carried out. Immediately following insertion of the tracheal tube the patient was able to breathe better and showed marked clinical improvement. Repeated aspiration of the secretions, oxygen therapy and supportive treatment were required for the ultimate recovery of this patient. At the present time there is no pulmonary defect as a result of the injury.

Case 3. J. S. The patient was a young man 28 years of age who was admitted to the hospital following an injury from being kicked in the left chest by a horse. He was in marked respiratory difficulty on admission. He was immediately placed in oxygen and supportive therapy instituted. After a period of time, surgical consultation was requested because of increasing respiratory difficulty and it was felt that the patient had a tension pneumothorax. There were fractures of the fifth and sixth ribs. When first seen he had marked subcutaneous emphysema, appeared somewhat cyanotic and was in obvious respiratory difficulty, using all of the accessory respiratory muscular structures. A thoracotomy tube was insterted into the chest and placed beneath the water seal. The patient improved somewhat and the subcutaneous emphysema did not increase.

He had considerable cardiovascular irregularity and difficulty, apparently due to mediastinal shift. He appeared to improve over a period of time but, after a period of ten days, developed purulent drainage, ran a fever and had an obvious empyema. This was treated by further drainage and the patient improved somewhat. However, the lung did not expand and it was felt that decortication was indicated. He was taken to surgery and a thoracotomy and decortication was carried out, at which time a thickened, visceral and parietal pleura with infected pleural fluid was found. There was a laceration of the lung, but it was not felt that resection was indicated as the laceration was rather large and diffuse in character. Following surgery he had a rather stormy course, developed respiratory difficulty, had a rapid pulse and cardiac irregularity, again apparently due to mediastinal shift. An emergency tracheotomy was done in the patient's room and following this he improved. Repeated aspirations through the tracheotomy tube were carried out, the patient was given antibiotics and oxygen and supportive therapy and continued to improve over a period of time. At the present time the patient's lung is about two thirds or more expanded, there is no infection or drainage and he is able to carry on a full day of work as a trainer and rider for a stable, including horseback riding, and other activity, without difficulty. In retrospect, although the patient was treated conservatively, it is felt that an open thoracotomy within the first day or two after injury would have avoided extensive hospitalization, surgery and subsequent disability in this patient.

Case 4. C. B. The patient is an 18 year old, white, single male who was brought to the hospital on December 4, 1953, following an automobile accident which occurred December 3. He was first treated by a physician in an out-of-town hospital with supportive therapy. The patient was in shock when first seen and on admission to the hospital the following day was still in shock, although he had been given adequate supportive therapy, including blood transfusions. On admission, emergency blood transfusions were started and the patient was prepared for surgery. Examination revealed marked respiratory difficulty and what appeared to be a massive hemothorax of the left chest with complete collapse of the left lung. X-ray was re-

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ported as a massive hydropneumothorax with fracture of the ninth and tenth ribs in the axillary line with possible additional fractures present.

In view of the severity of the injury, immediate surgery was felt to be indicated rather than any attempt at local treatment. A thoraco-abdominal approach was made on the left, removing the eighth rib. On opening the thoracic cavity the entire stomach, part of the spleen and greater portion of the omentum and transverse colon were found to be filling the left thoracic cavity. The left lung was completely collapsed and there was a large diaphragmatic tear. There was a large amount of blood, both in the abdominal and thoracic cavity. The free blood was aspirated, close to three quarts of blood being removed. A splenectomy was done and the abdominal viscera were replaced within the abdomen after being carefully examined. There were some bleeding points on the omentum and these were ligated. The lung was then expanded and no laceration or injury of the lung structure was seen. The left pherenic nerve was clamped and the seventh, eighth and ninth intercostal nerves were injected with xylocaine. The rent in the diaphragm was sutured with two layers of interrupted silk suture. Following this the left lung was re-expanded and the chest was drained by means of a Pezzer's catheter under water seal. The patient's progress was satisfactory after the initial shock was remedied and he was discharged from the hospital on December 16, 1953. At the present time he has no respiratory difficulty.

Case 5. J. F. This patient was a young man 21 years of age who was seen at the Veterans Hospital in August of 1948 following an injury when he was struck by an automobile. On entry to the hospital he had a tension pneumothorax on the left. There was slight deformity of one rib area in the chest and considerable pain on coughing or breathing. Examination revealed a traumatic hydropneumothorax on the left, but his general condition appeared to be fairly good. A thoracotomy tube was inserted and placed under a water seal and the patient was treated supportively. He recovered satisfactorily from the initial injury, but on clearing of the fluid and reaction in the left chest there was seen to be a foreign body present in the lung, although there was no external laceration. Approximately ten days after the injury a thoracotomy was done, at which time he was found to have a portion of rib measuring approximately three inches in length, together with the intermuscular bundle, that had been driven directly into the substance of the left lower lobe of the lung. There was no evidence of infection at the time of surgery. The rib and foreign material were removed and a local decortication carried out, together with suture of the laceration of the lung. The chest was drained with the water seal drainage. The patient made an uneventful recovery and was discharged two weeks following surgery with a completely expanded lung and no respiratory difficulty.

COMMENT

It is felt that these cases illustrate many of the major complications that occur following closed injuries of the chest. The first case illustrates the satisfactory early, simple treatment of smaller lacerations of the lung or bronchial tree that will seal off readily. The second case emphasizes the value and importance of tracheotomy in the treatment of these chest injuries, both in relieving respiratory difficulty and in relieving mediastinal emphysema that occurs. The third case reveals the importance of carrying through an adequate procedure in the treatment of lesions without regard for the apparent severity of the injury. It is felt that if this boy had been treated by open thoracotomy within the first few days following injury, we would have avoided the complications that occurred, the rather radical surgery that was required and the residual disability. This case also emphasizes the value of tracheotomy. In the fourth case, clinically and on x-ray, it was felt that the patient had a hemopneumothorax which might have been treated by aspiration or tube drainage of the chest. However, it is obvious that if this had been done we would have aspirated the stomach and contents rather than the chest and thus only have added to the complicated lesion. The patient was in shock and, perhaps fortunately, showed evidence of hemorrhage so that it was felt that he was bleeding enough that thoracotomy was indicated. At surgery the herniated, dilated stomach was found present in the chest. This case also illustrates the fact that intra-abdominal lesions can be examined and corrected at the time of thoracotomy, as was done in this case with the suture of bleeding points on the omentum and the splenectomy. The last case illustrates the importance of thoracotomy in removing foreign bodies from the intrapleural space.

In summary, we would like to state that we feel one should have a definite plan of treatment to follow in closed lesions of the chest and that one should not hesitate to employ rather radical surgery when necessary. We feel that open surgery in selected cases would avoid many of the complications that we see following these injuries. We do feel that a closed thoracotomy and water seal tube drainage of the chest should not be delayed and is indicated whenever required as it will not only afford relief to the patient but will allow one to observe the progress of the pulmonary lesion and thus to know whether any further more extensive treatment or surgery is required. We wish to emphasize the importance of tracheotomy in relieving patients with respiratory embarrassment and to point out the physiologic and therapeutic benefits that can be obtained by means of such a procedure. We feel that many patients whose condition is otherwise hopeless may be saved by use of a judicious tracheotomy. We have tried to illustrate by means of case histories the various procedures used and outlined in our plan of treatment.

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1. Gray, H. K.: J. Iowa M. S. **44**:108 (March) 1954.
2. Gilmore, W. E.: West Virginia M. J. **50**:69 (March) 1954.

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Case Report

Primary Tumor of the Ureter

JOSEPH J. NARYKA, M.D., AND WILLIAM F. MELICK, M.D., *St. Louis*

PRIMARY CARCINOMA of the ureter is a relatively rare condition although recent reviews of the literature show an increasing rate, probably due to better diagnostic measures and an increasing awareness of the lesion.[1] Recently we have seen two cases of ureteral tumors which are of importance because they illustrate, perfectly, the possible diagnostic pitfalls unless one keeps the possibility of a ureteral tumor in mind.

REPORT OF CASES

Case 1. M. A., a 55 year old, married white woman was seen because of hematuria of one year duration. One year previously she had been admitted to another hospital because of right lower quadrant pain. Her work-up consisted of gastric analysis, gastrointestinal series, proctoscopic, and barium enema. These were all normal so that an exploratory laparotomy was done and the patient was informed that "nothing was found and that a normal appendix had been removed." The day following surgery, hematuria was noted by the patient for the first time. Subsequently, eight different cystoscopies and pyelograms were done and no diagnosis made other than that the right kidney was bleeding, but appeared normal. She continued to have intermittent, gross, hematuria and right lower quadrant pain.

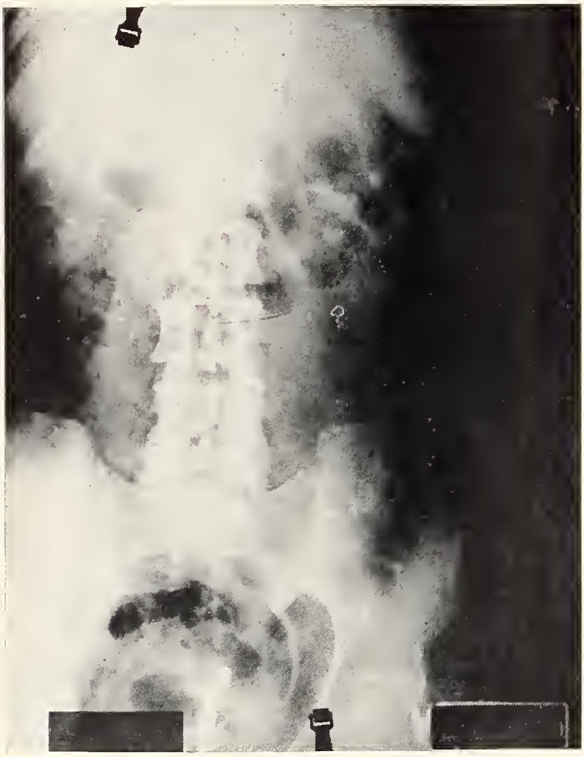

Fig. 1. Right hydronephrosis visualized during routine retrograde pyelography.

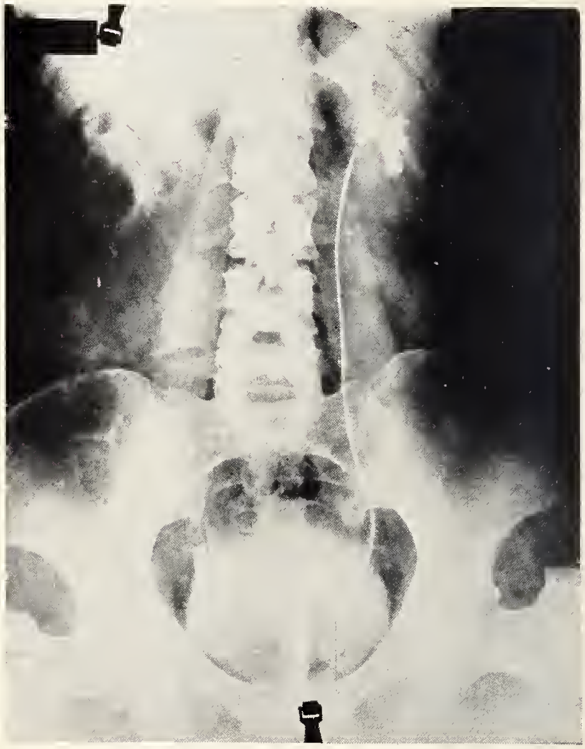

Fig. 2. Normal left retrograde pyelogram.

Observation cystoscopy confirmed that the bleeding was from the right orifice. A review of the x-rays made previously confirmed our suspicions that no ureterograms had been made. The patient was admitted to the hospital and a routine pyelogram showed a normal left urinary tract but a mild hydronephrosis on the right side (figs. 1 and 2). A pyelo-ureterogram made by occluding the right orifice with a Foley bulb ureteral catheter shows the characteristic spindle deformity in the middle third of the right ureter (fig. 3). An enlargement of this portion of the ureter shows the characteristic spindle shaped deformity with a negative filling defect due to tumor (fig 4). Nephro-ureterectomy, including a cuff of bladder, was done. Pathologic examination showed a Grade III transitional cell carcinoma of the

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From the Department of Urology, St. Louis University School of Medicine, St. Louis, Mo.

ureter. The postoperative course was uneventful and the patient has been followed to date and there has been no evidence of bladder tumor or other metastases.

Case 2. F. B., a 66 year old male, was first seen in January 1953. Ten years previously, while in another city, the patient developed hematuria and observation cystoscopy revealed bladder papilloma. He was hospitalized and was told that the left ureteral tube was strictured but that an intravenous pyelogram showed his kidneys to be normal. The tumors in the bladder were then resected. Four years and two years previously, the patient had had the same procedures carried out in St. Louis. He came to us for a routine check and a review of intravenous pyelograms showed them to be normal and the bladder, on observation cystoscopy, showed no evidence of tumor. Eleven months later, however, the patient again presented himself with hematuria. Observation cystoscopy showed this to be coming from the left ureteral orifice. He was admitted to the hospital for urologic study and it was found that a catheter could not be passed up the left ureter (fig. 5). An intravenous urogram showed both kidneys to be completely normal (fig. 6). On attempting to make a pyelo-ureterogram with a Foley bulb ureteral catheter, a spindle deformity could be demonstrated (figs. 7 and 8), but no dye could be forced beyond that point. Since the intravenous urogram was normal, we felt that the only type lesion that would let the dye come down without obstruction, but prevent it from going up, would be a papilloma hanging down in the ureter with the base

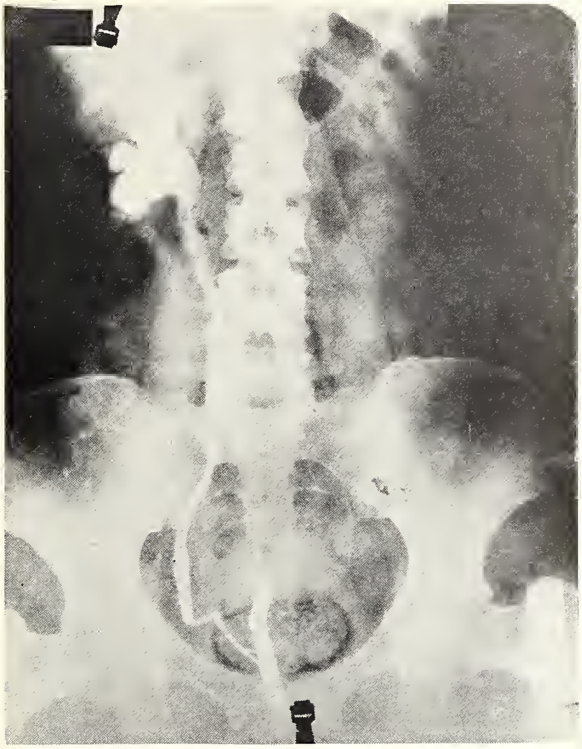

Fig. 3. Spindle shaped defect in the middle third of the right ureter on pyelo-ureterogram made with a Foley bulb catheter.

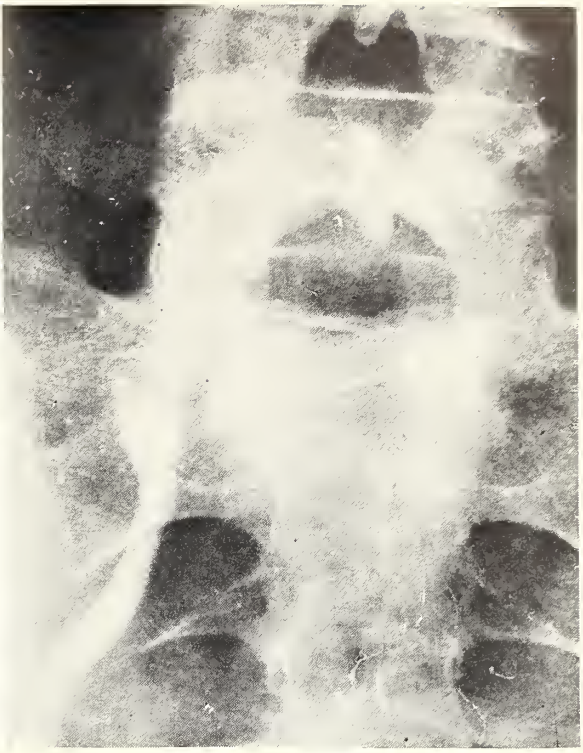

Fig. 4. Enlargement made of the defect portion of the right ureter shown in figure 3, showing negative defect and spindle deformity more clearly.

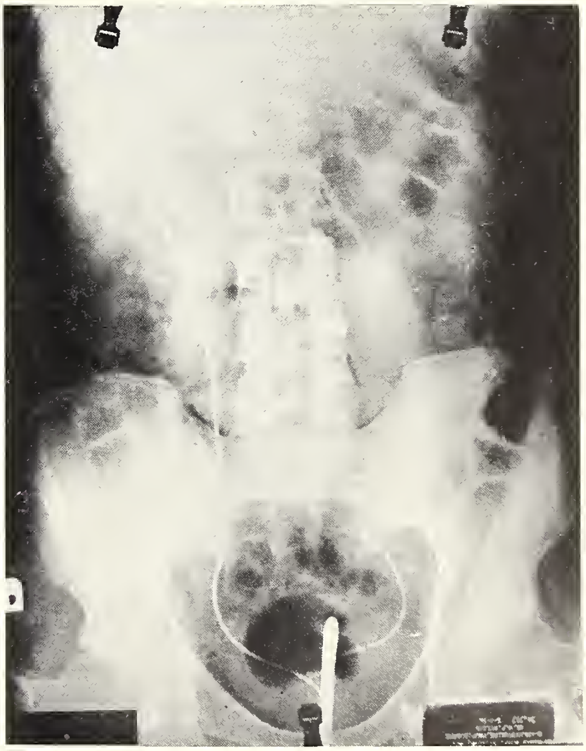

Fig. 5. Attempt to pass ureteral catheters reveals a block in the lower third of the left ureter.

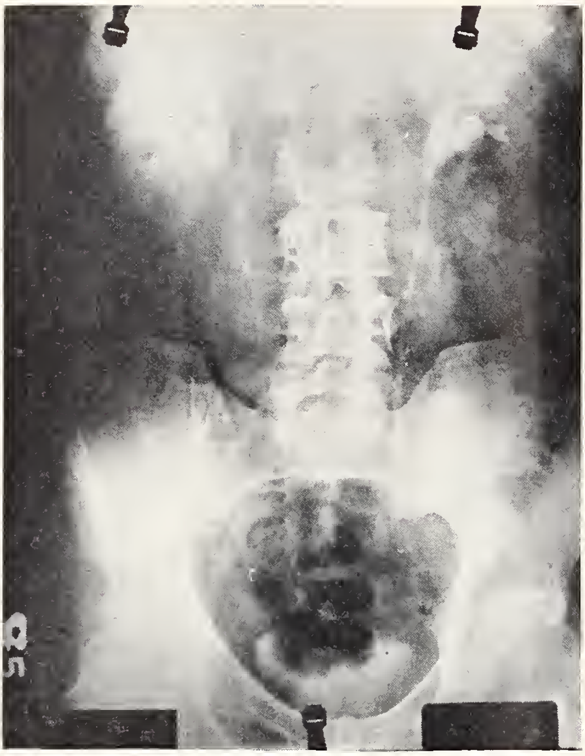

Fig. 6. A normal, five minute excretory urogram fails to show cause of left ureteral obstruction. Note complete absence of any dilatation in the left renal pelvis and that portion of the ureter which is visualized.

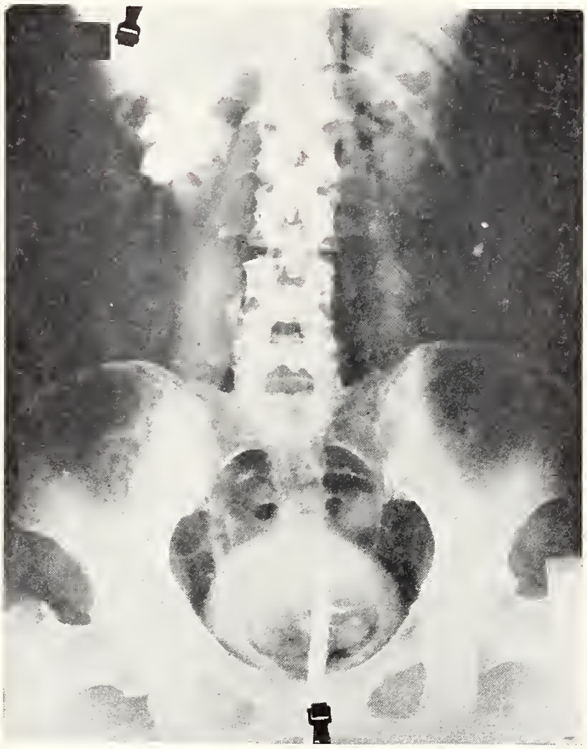

Fig. 7. Attempted left ureterogram made with a Foley bulb catheter shows a spindle defect, but no dye can be forced beyond the obstruction.

above, and acting as a ball valve. Surgical exploration of the lower left ureter revealed a large, hard, spindle deformity lying on the large pelvic vessels, from which it was freed with difficulty. A cuff of bladder was removed, and a complete nephro-ureterectomy was carried out (fig. 9). Upon opening the ureter after its removal, the ball valve action of the tumor was confirmed (fig. 10). Pathologic examination showed it to be limited to the local mass and there was no evidence of invasion. The post-operative course was uneventful and he is now being followed to remove any further bladder papilloma should they develop.

DISCUSSION

The diagnostic error made in the first case was that in the face of gross hematuria, every part of the urinary tract was ruled out except the ureters. It should be routine, in every case of hematuria in which the cause cannot be found, to do ureterograms as well as pyelograms. Routine pyeloureterograms can be made on all cases of retrograde pyelography by first filling the renal pelvis and then injecting another 2 or 3 cc. of dye as the catheters are withdrawn. While these are not as good as those made with a Foley bulb or Braasch bulb ureteral catheter, they do indicate gross deformities which can be checked by these methods.

Fig. 8 Repeated examination shows complete spindle in the ureter with a complete block.

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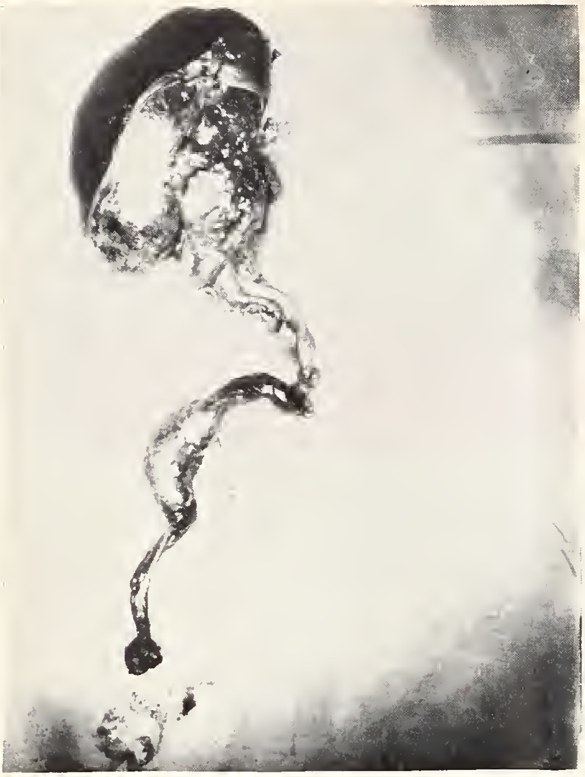

Fig. 9. The gross specimen consisting of kidney, ureter and cuff of bladder.

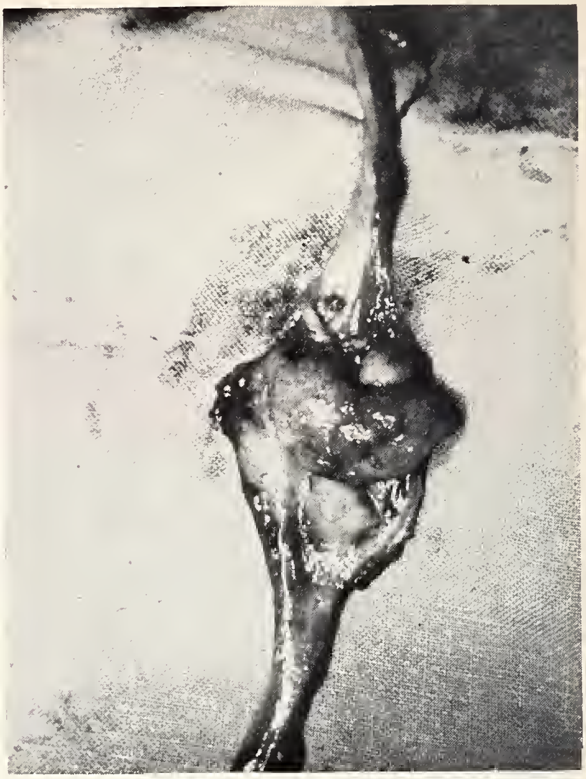

Fig. 10. Ureter opened, showing the tumor hanging down the ureter, acting as a ball valve.

in the bladder secondarily to papillary tumors of the kidneys or ureters. Indeed, in many cases of the latter, it is the bladder tumor that first gives rise to symptoms. Given a patient in whom cystoscopy shows a bladder papillary tumor, it is imperative that pyelo-ureterograms be made. Due to the tremendous improvement in the dyes and technic of intravenous urography, the pyelograms obtained now by the intravenous route are extremely valuable and usually diagnostic. However, unless special care is taken, the intravenous pyelogram frequently shows a good visualization of the renal pelvis without visualizing the ureters. Also, many ureteral tumors do produce a hydronephrosis and thus indicate their presence, but some, as in the second case cited, do not. The presence of bladder papilloma, ureteral obstruction and hematuria indicate possible ureteral tumor even though there is no hydronephrosis, and indicate the need for special measures to secure a ureterogram. Again, the best diagnostic measure is a knowledge of the condition and a confirmation of the clinical suspicion by a ureterogram made with one of the bulb ureteral catheters.

SUMMARY

1. Hematuria is a cardinal symptom of urinary tract cancer and visualization of the entire urinary tract, including the ureters, should be done in all cases in which routine pyelograms fail to reveal the cause of the bleeding.

2. A normal intravenous pyelogram does not necessarily rule out a ureteral tumor.

3. While ureteral tumors are rare, they do occur, and the best diagnostic measure is a knowledge of the condition so that pyelo-ureterograms are made.

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Special Article

Rural Medicine in Missouri

ARCH E. SPELMAN, M.D., *Smithville*

When we speak of medicine in rural communities, it usually carries with it a little different viewpoint than when considered in the urban areas. Medical service in the city is generally considered just what it is, the diagnosis and treatment of disease by a licensed practitioner of the healing arts. But, in the rural areas it creates the connotation of nearly all matters pertaining to health; that because, traditionally, the rural practitioner in Missouri has been the general doctor, it was his accepted responsibility to supervise all matters of health. When we speak of health matters and the doctor of medicine at the same time, we create a misconception which may have had a great deal to do with the delay of better rural health facilities.

When we study health matters, we find that they can be broken down into the problems of society in which the practicing doctor's duty, that of diagnosing and treating diseases, becomes only one of the factors to consider. Health matters anywhere, but more particularly in the rural areas, must recognize the problems of sanitation, of nutrition, of immunization, of hospitalization and of prepaid medical insurance, along with the diagnosis and treatment of disease. And when we assess these matters in their importance, many social students have estimated the latter as only 15 per cent of our problem.

When we speak of the specific duties of the general practitioner, we have 85 per cent of our problem left out of consideration. Traditionally, the doctor has been asked to solve or serve as the supervisor for solving these problems. He was the health officer in general, he looked after contagions, checking the water supply of the community, complaining to the city council when sanitation in the community was not what it should be. He kept a running mental note on the immunization of the children and undertook to stem general epidemics, such as typhoid fever, by general immunization. He tried to educate his community concerning nutrition, prescribed cod liver oil for the children, complained about the over-indulgence in unhealthy foods. He tried to find hospitalization for people and often begged for care in the urban hospitals for those unable to meet the financial burden. He often improvised some type of hospital in an old home or in his office and he preached budgeting to people to make it possible for them to pay their hospital bills.

The general practitioner did a good service and perhaps all that could be expected in its time. But with our increased understanding of medicine, our better transportation and communication facilities, more is demanded and with society becoming more complex all the time because of better transportation and communication facilities, the people themselves are becoming more demanding in matters of health. The general practitioner in the country is finding himself unable to meet these demands and, partially in self defense, gives up and moves to the urban areas and to escape the responsibility, becomes a specialist. The rural community loses another doctor and complains bitterly of lack of medical and health care.

Now, if they complain, who do they complain to? There is no agency with any authoritative power to do anything about it. It looks like the problem is one for the people themselves. For some reason, both religion and health have been social matters about which a large number of people have always held the view that they should be free. Free, not only for the asking, but they should not even have to ask and frequently expect to have it rammed down their throat. Medicine, or health, have become factors in society that cannot be divorced from economics. And in no place can the economics be so simple as in the rural areas where many health problems can be solved by the interest of the community in learning how the individual can solve them for himself.

Many years ago, I had wondered if the idea that was then held that rural people were too poor to have good health or medical facilities was true. Since then we have spent a great deal of effort and money in studying this. Today, we are thoroughly convinced that the rural people in general are less healthy than people in the urban areas. This is contrary to the general belief. We are also convinced that rural people are more able economically to solve their health problems than people in the city. It has been their lack of leadership and the lack of recognition of their own responsibilities that has kept them from getting the best health services in many instances.

What we are trying to tell you is, we can solve our own health problems in rural Missouri on a local basis. It is our responsibility. The doctor has the responsibility of making every effort to cooperate, aid and advise in health matters in his own community, but he is no longer entirely able to carry the burden of solving the 85 per cent of health matters other than that pertaining to the actual practice of medicine. This does not mean that the doctor has no responsibility left in the general health problem. He is a citizen and has always been conscious of his responsibility as such. He can do much in guiding health problems in cooperation with other responsible citizens.

One of the most needed things is local leadership. Every community has health needs that are peculiar to it. To attempt to lay out a health program to clamp on every community and rigidly execute it, is foolish. Local leadership must be developed to study the individual community needs and the means for improving or correcting deficiencies. One of the best ideas for developing local leadership of which I know is the county or community health council.

It is difficult to define a health council; it is a voluntary group of responsible citizens banded together to make an effort to disseminate information and serve as a local forum for discussion of local health problems. That falls far short of expressing its potential. I think one of the best definitions I have heard came from a

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Presented at the Missouri Agricultural College Forum, Columbia, Nov. 3, 1954.

woman in our county when she said "Well, it is just like the Indian's pow-wow. They gathered together and exchanged ideas and all are enlightened and a program for action is developed." These health councils can serve a great purpose in developing leadership among the people and to come to conclusion for a concerted action of the public in general.

One source of financial aid could be by taking advantage of an act of the state legislature a few years ago by which a county can vote a mill tax to be used for public health. This group known as a health unit, can be established to carry out local projects. It can serve to enlighten the public in health matters, to study and correct sanitary measures, to aid in public school health programs, to look after immunization. Many counties are taking advantage of this act of the legislature. Carter County with a population of less than 5,000, has just set up such an organization. We can expect great improvement in health conditions in these counties. It will be necessary, however, for the responsible citizens to stay alert in their health council programs and help guide and cooperate with the health units.

We have in Missouri a fine public health department. It is active, efficient and has accomplished a great deal and should be commended particularly because of its limited budget. But the state public health department neither has the means, the facilities nor the authority to accomplish anything but the most limited health measures in the individual community. They do, however, willingly serve as advisors and may guide local leadership most effectively.

The doctor situation itself in the rural part of the state has been a growing problem for the last twenty-five years. The doctor has been attracted to the city for various reasons and the local rural areas have suffered sometimes for lack of easily available medical care. This has been of considerable concern to the Missouri State Medical Association and for a number of years, there has been a vigorous and organized effort by the Association to cooperate with communities needing a doctor and helping the doctor to locate in such communities. The Medical Association has had considerable success in this but, admittedly, there are many places wanting doctors that do not have them. Sometimes, it is because the area is not sufficiently populated to support the energies of a doctor. Sometimes it has been because the community did not have public facilities that would persuade a doctor to settle there. There probably is no actual shortage of doctors in Missouri, it is largely a matter of what might be called unsatisfactory distribution of them. There is much that can be done by the local citizenry to attract doctors.

A popular idea, in recent years, has been to place a hospital in every community. While this has some fine advantages, there are some practical disadvantages. To operate a hospital with the idea of doing the most good and the least harm, requires a great deal of money. The economic structure of many communities would not allow the operation of a hospital. Better roads have brought hospitalization time-wise to many communities. If a community, however, actually needs a hospital there is probably sufficient economic strength to build and operate one. A great difficulty has been in developing a concerted effort of the citizenry to band themselves together and lay aside all prejudices among them to try to accomplish what is the best thing for the general health of the people. If that is done there are few communities that cannot establish an adequate hospital service.

Another great need in the rural area for improving health is to aid the individual in solving the economic problems that are always associated with it. We now have 90 million people in the United States, more than one half of our entire population, who are paying for some type of prepaid medical insurance. More than one half is handled by the nonprofit Blue Cross and Blue Shield organizations. We still have, however, an inadequate system of enlightening and encouraging the rural people to budget for their necessary medical care by buying worth-while prepaid medical insurance.

Here the health council can serve well to help distribute the information necessary to encourage people to look ahead and attempt to save themselves from economic disaster or actual medical neglect by carrying prepaid medical insurance. It is true that few people can carry adequate medical insurance without some sacrifice, but the responsible citizen will realize that society has as much right to ask him to sacrifice for health measures (to solve his own health problems) as is necessary to sacrifice to gain food, clothing and shelter for himself and those for whom he is responsible. There is a tremendous need to teach this idea to people in general.

The indigent medical problem in rural Missouri is startling when one, so closely associated with it as a practicing country physician, studies it. For generations, it has been the custom for the local physician to accept the responsibility for all medical care of the indigents and he has most often willingly accepted that responsibility. Today, however we must accept the idea that medical care can no longer come from the physician's pill bag. Expensive equipment, expensive drugs, hospitals and various other material things are quite necessary to give an individual the best that medical science can offer him today. In the past it has often been the custom for the rural community to shift the burden for such care to the urban hospitals and these hospitals kindly obliged.

Urban hospitals today with the drying up of the great pool of liberal gifts from the income of the wealthy, are finding themselves much less able to carry this economic load. The doctor in the local community, in his effort to do what is best for the individual, is frequently finding there is no solution for this problem. Actual medical neglect is occurring. Occasionally, individuals in the community complain about it but there has been little concerted effort in many communities to make any correction of it.

Under the Missouri statutes, it is the duty of the county courts to provide for the indigent. They, of course, are only the agents of the people. Frequently, because of limited understanding or limited means, only a superficial effort is made to provide. I cannot agree with those who believe that my neighbor, destitute, should be a ward of society, dependent on state or federal government. The best for moral values—for bringing out and developing the best in the character of man—the more local a helpful hand is given to the less fortunate, the stronger are our communities and general society. Indigent medical care problems should not be solved in a greater social group than that of the community—county or municipal. There is much need in our state for studying this matter and a revision of our attitude toward the indigent sick.

(Continued on page 162)

EDITORIALS

Medical Color Television of Today to Be Presented at 1955 Annual Session

After an absence of four years, medical color television is reappearing in the teaching program at the Annual Session of the Missouri State Medical Association in Kansas City, March 27, 28, 29, 30. In addition to addresses presented by outstanding guest speakers (program appears on page 148) the subjects that will add to the postgraduate course of the Annual Session by large screen color TV include "Modern Treatment of Tuberculosis, Including Surgery," "Thrombophlebitis," "Common Fractures and Their Treatment," "Sympathetic Nerve Block," "Plastic Surgery: Operations Which Are Commonly Done," '"Bowel Obstruction, Including Surgery," "Rheumatism Clinic, Including Joint Injection and Physiotherapy," "Exfoliative Cytology" and "Office Proctology."

During the four year interim of color television at an Annual Session, the color medium has incorporated a number of striking changes. Without stretching a point, it can be said that the colorcasts seen by members attending this year's meeting will bear as much resemblance to the colorcasts shown in 1951 as a young man bears to his appearance as a child.

In view of the increasing number of educational medical programs that are being televised each week, it might be appropriate to examine the present status of this, the first medical TV series of them all. To date, the Color Television Unit of Smith, Kline & French Laboratories has presented programs for seventy medical meetings in this country, Canada and abroad. While more than 343,000 doctor-visits have been paid to the telecasts, the tale is told in the yearly attendance records. Every year since 1951, more doctor-visits have been recorded than the year previous. This fact indicates that now, long after color TV has lost the appeal of novelty, physicians are still attracted by the peculiar advantages which the medium brings to medical instruction.

Modern medical education has been confronted with an increasingly urgent need—a need created by the greatly enlarged area of study medicine has assumed over the last half century, and by the growing number of students and physicians that have swelled both its undergraduate and postgraduate ranks. The constant factor in this otherwise changing situation has been the necessity of providing students with close-up views of clinical demonstrations and operative procedures.

Surgery today requires an operating team that virtually surrounds the operating table. Students can watch as a group from an amphitheater or individually from a vantage point within the operating room. The former is unsatisfactory since the operating team often completely obscures the view of the operative field for long periods of time. Then too, the distance makes it difficult to see fine details. The latter, of course, is not practical for group observation.

Filmed operations can be substituted for "live" observation but only at the cost of the suspense and interest inherent in watching an operation actually in progress. On the postgraduate teaching level, the problem is just as acute for those physicians who attend a meeting with the hope that, in the course of the meeting activities, they might have the opportunity to learn and watch from leading surgeons working on such operations as they themselves perform frequently in their own practices.

Clinical lecturers have been faced with a three cornered predicament. While attempting to show the most pertinent clinical material available, no matter how small or large the various items might be, they are obliged to demonstrate this material with the greatest visual clarity. Finally, they must reach a large audience without losing effectiveness. At a medical meeting of any size, the limitations imposed on the lecturer by a platform space, distance from his audience and sheer convenience usually preclude his presenting a complete clinical picture.

Medical color television comes to the fore, not as something to "revolutionize" the art of teaching, but as the method of communication best adapted to the conditions of the times. The distinctive difference between color TV and all other forms of communication lies in the uses of the color camera. A participant in the Kansas City TV program will have two highly mobile studio cameras serving him, allowing the utilization of many more production technics than was possible at the last M.S.M.A. color TV program when the unique but unwieldy SKF surgical camera was employed to televise the entire program. Formerly, the surgical camera remained stationary while the clinical subject matter passed before it. Now the participant not only has more scope in his studio movements, but can show patients, slides, graphs and clinical material in whatever order and at whatever pace he desires. The camera's range of lenses can accommodate any material which can be brought into the studio area. If necessary, each viewer can be shown an extreme close-up of subject matter ordinarily too small to be seen clearly from a distance of more than a few feet.

In the operating room, a vantage point only a few feet above the operating table is gained for the audience by means of the surgical camera mentioned. The first color television camera ever built, it remains unique in appearance. A movable camera head is mounted on one end of a ten foot boom which is in turn balanced on top a steel bar some six feet high, giving the camera the appearance of a huge letter "T." Suspended directly over the operative field and just above the heads of the operating team, the camera secures a view for the audience equalled only by that of the surgeon and a few of his assistants. If the incision is small or the surgery extremely detailed, the site is enlarged by use of a more powerful lens.

At the other end of the camera chain, the view seen by the camera is greatly magnified by two giant video screens, each measuring 4½ by 6 feet. These screens, specially built for Smith, Kline & French by the Columbia Broadcasting System, enable more than 1,000 persons to see a picture 27 times larger than that provided by the 12 inch screens used previously at M.S.M.A. meetings. The dramatic character which the screens lend to surgery was pointed up at a recent medical meeting when a mitral commissurotomy was being televised. The exposed heart filled almost the entire screen and it was noticed that some people in the audience were unconsciously moving their heads in time with the heartbeats.

Each medical color TV program can be readily adapted to the interest of the particular group for whom it is televising, yet within that area it can handle topics differing widely in their method of presentation. Most important of all, because of the size of the screens and of the audience they can serve, virtually every registrant at a meeting is assured of a view of operations and clinics that cannot be obtained by any other means.

Impressed by its effectiveness in postgraduate teaching, many medical schools have already installed color TV facilities and many more are planning to do so. The medium presents both an answer and a challenge. Only time can tell how successfully closed circuit color television will meet future needs of medical education, but the promise is there.

Non-Medical But Potentially Effective

Today—the day on which this short editorial is written—has been set aside as S.D. Day. On this one day we are going to see what a nationwide conscious effort toward safe driving will accomplish in reducing the carnage and wreckage, crippling and suffering due to our careless driving on the highways. When this editorial appears two months hence, we shall know the answer.

It is, indeed, an indictment of our general moral and ethical development that such conditions should exist. It is just as great an indictment of what should be good common practical sense.

The number of preventible deaths, permanent crippling and other injuries due to highway accidents—the suffering entailed, both physical and mental, the property damage and homes bereft of bread winners—present an appalling picture.

There is today no project of medical research, be it however large, that could envisage as great a benefit as would be equivalent to the result of the prevention of highway fatalities and other highway accidents. And this would require no endowment, no medical school or hospital research departments. It would not require doctors, nurses, laboratory workers—in fact, it would require no medical training whatever. Just safe driving. It is difficult to enforce such a concept by law. It has to come through education of the people. Few people realize or appreciate what great work the American Automobile Association is doing in this educational respect.

F. T. H'DOUBLER, M.D.

"To Thine Own Self Be True . . ."

Let's reminisce just a little about our premedic years and the years of study and hardship that followed while in medical school and internship.

Most of us came from families of average financial means. Upon completion of our high school credits we entered college and began our premedical basic science studies. These years were comparable to the good old school days of the average "Joe College," although our classes were never in the category of the so-called "snap courses."

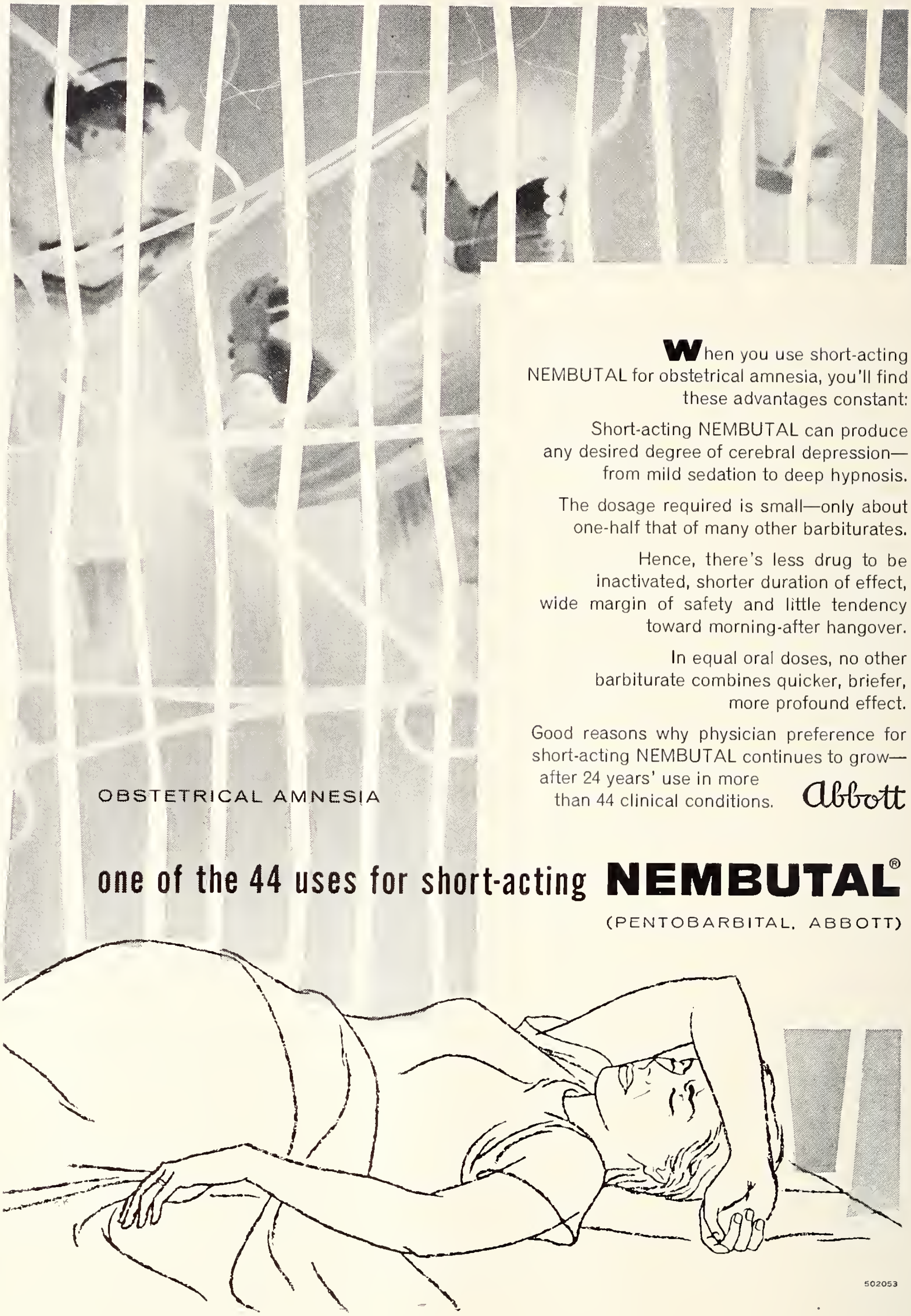
We then entered medical school and after four years of deprivation, sacrifice and financial insecurity we were fortunate indeed if we were included in the 50 per cent survivor group who received a sheepskin from our Alma Mater. Then came our internship with a petty cash salary, room, board and laundry. Then the state boards and the reward, with a feeling of pride and accomplishment, of a license to practice medicine. Brother, we earned it.

That license we earned, legally require and covet gives us and only us the legal right to practice medicine. No one else may use it except by fraudulent means. Only an individual has the right to practice medicine; no corporation has ever been given that right. And yet today we have in our midst the greatest fraud ever attempted on our profession, corporate medicine.

The reason is simple indeed. Some of our colleagues have sold their license to practice medicine to hospitals and private corporate medical schools for an annual stipend or rental fee. Many of these institutions fraudulently collect physicians' and surgeons' fees for financial gain in their respective corporate set-ups. Many of their administrators, doctors of medicine, thunder to the press about the ethics and methods of general practitioners, while they themselves, the professors of ethics, have failed in teaching ethics to themselves.

Corporate medicine is as undesirable and as un-American as is state medicine, and is only a stepping stone in that direction.

MARTYN SCHATTYN, M.D.



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Missouri Medical Meetings

Missouri State Medical Association, Kansas City, March 27-30, 1955.
St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.
Barton-Dade County Medical Society—third Wednesday of each month.
Benton County Medical Society—meets only on call.
Boone County Medical Society—first Tuesday of each month.
Buchanan County Medical Society—first Wednesday of each month.
Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.
Callaway County Medical Society—third Thursday of each month.
Cape Girardeau County Medical Society—first Monday of each month.
Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.
Clay County Medical Society—last Tuesday of each month.
Clinton County Medical Society—meets only on call.
Cole County Medical Society—first Monday of each month.
Cooper County Medical Society—first Monday after the 15th of each month.
Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.
Dunklin County Medical Society—first Tuesday of each month.
Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.
Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.
Greene County Medical Society—fourth Friday of each month.
Henry County Medical Society—meets only on call.
Holt County Medical Society—meets only on call.
Howard County Medical Society—meets only on call.
Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.
Jasper County Medical Society—second Tuesday of each month, September through May.
Jefferson County Medical Society—meets only on call.
Johnson County Medical Society—meets only on call.
Laclede County Medical Society—second Monday of each month at 6:00 p.m., at the Louise Wallace Hospital, Lebanon.
Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.
Lewis-Clark-Scotland County Medical Society—meets only on call.
Lincoln-St. Charles County Medical Society—third Thursday of each month.
Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p.m.
Miller County Medical Society—meets only on call.
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.
Moniteau County Medical Society—second Thursday of each month.
Newton County Medical Society—meets only on call.
Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.
North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.
Pemiscot County Medical Society—third Thursday of each month.
Perry County Medical Society—second Thursday of each month.
Pettis County Medical Society—third Monday each month September through May.
Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.
Pike County Medical Society—third Tuesday of each month.
Platte County Medical Society—meets only on call.
St. Louis County Medical Society—second and fourth Wednesday of each month.
St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.
Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.
South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.
Vernon-Cedar County Medical Society—meets only on call.
Webster County Medical Society—meets only on call.
West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

As the New Year begins, numerous voluntary health organizations are putting the finishing touches on their educational and fund raising campaigns. The National Foundation for Infantile Paralysis, during the month of January, has promoted and carried on the annual March of Dimes. This worthy cause is well founded in the state when one considers the following facts and figures.

In the State of Missouri, in Boone, Clay, Greene, Jackson and Pemiscot Counties, during 1954, more than 9,000 second grade school children received shots of the polio-trial vaccine in the hope that observed results would prove the value of the orangish fluid in preventing paralytic polio. Evaluation is under way, but results will not be known until the spring of 1955.

In addition, the blood derivative, gamma globulin, was given to hundreds of children and expectant mothers for temporary protection against paralysis.

In 1953, county chapters of the National Foundation for Infantile Paralysis in Missouri spent $724,338.72 in providing medical care for more than 2,500 individual patients. This figure includes some 2,000 patients who contracted polio in a previous year but required continued care.

Of all March of Dimes money raised in Missouri since 1938, 66 per cent has actually been spent in direct assistance to this state's patients.

It is assumed that doctors in the state are well aware of the great need for their support, educationally, financially and professionally in this worthy cause.

It appears as though the use of television in postgraduate medical education is gaining considerable momentum. On February 5, the Council on Medical Education and Hospitals of the American Medical Association is sponsoring a conference on "The Potential Use of Television in Postgraduate Medical Education" at the Palmer House in Chicago. The program seems to cover important questions that would logically be posed in any practical consideration of this medium of postgraduate medical presentations.

"Looking Both Ways" is the theme of the Tenth National Conference on Rural Health, sponsored by the Council on Rural Health of the American Medical Association, to be held at the Schroeder Hotel, Milwaukee, Wisconsin, February 24-26, 1955. The theme suggests a review of past activities and progress that has been made through the preceding conferences. With this in mind such topics as the following will

(Continued on page 162)

Members in the News

Appearing on the program of the American College of Surgeons meeting in Cleveland February 21 to 24 will be **Carl A. Moyer**, M.D., **Thomas H. Burford**, M.D., **Justin J. Cordonnier**, M.D., **Harvey R. Butcher, Jr.**, M.D., **James Barrett Brown**, M.D., **Minot P. Fryer**, M.D., and **Milton Lu**, M.D., St. Louis.

The Poplar Bluff *Republic* on December 2 printed a nice article about **Andrew F. Bugg**, M.D., Ellington, giving a history of his fifty-three years as a country doctor.

The St. Mary's Hospital Medical Staff, Jefferson City, re-elected **J. A. Ossman**, M.D., president for the coming year at an annual dinner meeting on December 8.

At a meeting held in Greene County to study immunization of school children on December 8, the Greene County Medical Society was represented by a committee composed of Drs. **E. J. Schwartz**, **Stanley S. Peterson**, **Joseph L. Johnston** and **Kenneth E. Knabb**, Springfield.

An open meeting sponsored by the United Church Women's Council of Jefferson City on December 3 was addressed by Dr. Cecilia Sequeira of Bombay, India, who is doing graduate study in pediatrics at Firman Desloge Hospital, St. Louis.

The Committee for Equal Representation of St. Louis has recommended **W. A. Younge**, M.D., St. Louis, as a candidate for election to the St. Louis Board of Education in the April 5 election.

On invitation of the directors of Burge Hospital, Springfield, the Greene County regional cancer diagnostic clinic has been moved to the hospital.

The Rotary Club of Lamar had as their guest speaker at a recent meeting **Paul L. Barone**, M.D., Nevada.

Patients and hospital equipment were transferred from the old building to the new one of the John Fitzgibbon Memorial Hospital at Marshall late in November.

A health council workshop in Sedalia late in November was attended by eighty people representing sixteen counties. The discussion theme was "Community Planning and Work Means Better Health Services." **James R. Amos**, M.D., and **C. W. Meinershagen**, M.D., Jefferson City, of the Division of Health, took part in panel discussions.

The St. Louis Medical Society Orchestra presented its first public concert in December. **B. G. Mannis**, M.D., is chairman of the orchestra committee and other members of the committee are **Byron J. McGinnis**, M.D., **Mary E. Morris**, M.D., and **Walter J. Siebert**, M.D.

The Pettis County Medical Forum, sponsored by the medical society and the newspaper, had Albert Preston, Jr., M.D., Kansas City, Kansas, as its speaker at its fall session.

Construction of the Willow Springs General Hospital was begun December 14 for **M. B. Perkins**, M.D., Willow Springs.

A silver tray engraved with facsimile signatures of past presidents and directors of clinics was presented Mrs. E. Leas Clower by the Kansas City Southwest Clinical Society marking the culmination of twenty-five years with the society.

The American College of Chest Physicians has appointed **Charles A. Brasher**, M.D., Mount Vernon, chairman of its council on hospitals.

A five member board of trustees for the new Ray County Hospital was appointed late in December and includes **E. E. Gay**, M.D., Richmond.

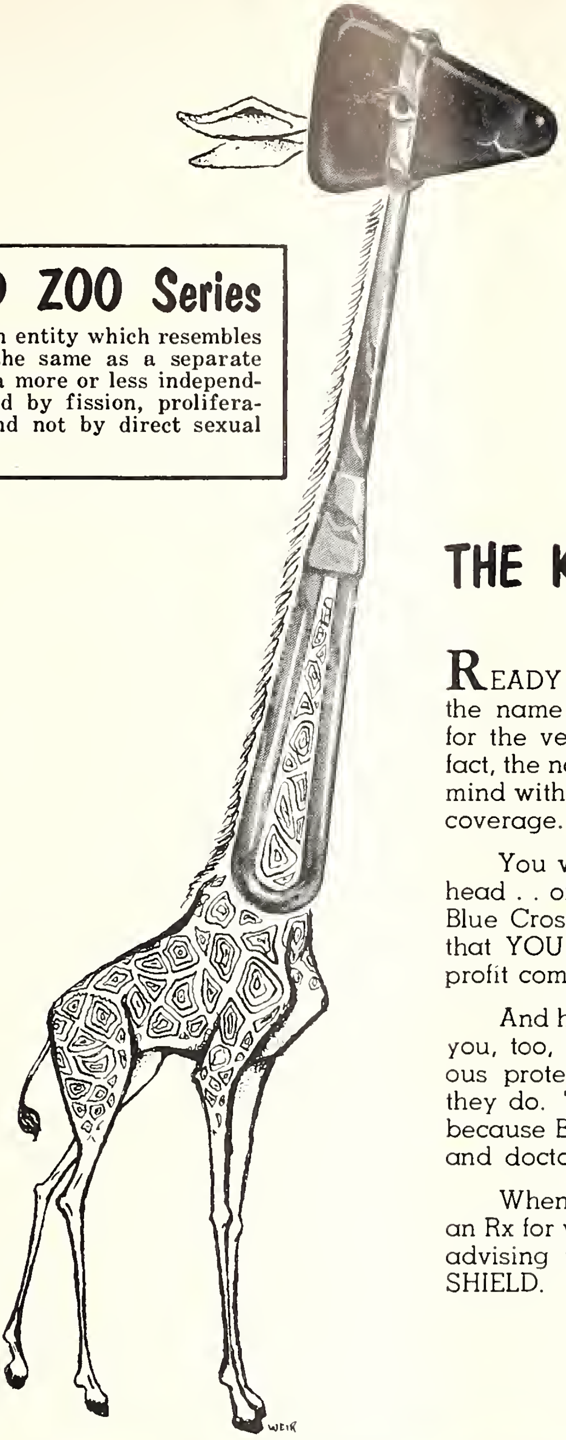
A new record room, as well as two new hospital patient rooms, were recently opened at the Lee Hospital, Fayette.

The medical staff of the Chillicothe Hospital re-elected its present officers to serve in 1955 at a meeting on December 7. The officers are **C. M. Grace**, M.D., president; **V. D. Vandiver**, M.D., first vice president; **M. E. Elliott**, M.D., second vice president; **Donald M. Dowell**, M.D., credentials committee; **Joseph Conrad**, M.D., program chairman, and **W. L. Fair**, M.D., medical records committee.

The new addition of the Audrain County Hospital, Mexico, was dedicated on December 12 and many attended the dedication and open house which followed.

The Kansas City Area Hospital Association at a meeting in December elected **Arch E. Spelman**, M.D., Smithville, for a three year term on its board of directors.

The medical staff of St. Francis Hospital, Washington, recently elected **H. H. Schmidt**, M.D., as chief of staff.



The ZOOID ZOO Series

zo'oid *(zo'oid)*, *n.* An entity which resembles but is not wholly the same as a separate individual animal; a more or less independent animal produced by fission, proliferation, or the like, and not by direct sexual methods.

THE KNOCK-KNEED GIRAFFE

(Ella Patella)

READY as a reflex is the public's response to the name **Blue Cross — Blue Shield.** It stands for the very best in health care prepayment. In fact, the name is almost synonymous in the public mind with the whole field of hospital and medical coverage.

You won't have to hit your patients over the head . . or even tap a patella to get them to join Blue Cross and Blue Shield when you tell them that YOU — their doctor — sponsor these non-profit community Plans.

And having them as members means more to you, too, because of their assurance of continuous protection . . wherever they go, whatever they do. There's no problem in payment, either, because Blue Cross and Blue Shield pay hospital and doctor direct.

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BLUE CROSS
BLUE SHIELD

HOSPITAL - MEDICAL - SURGICAL PLAN SPONSORED BY DOCTORS

SAINT LOUIS
KANSAS CITY

St. Louis Medical Society honored members who have practiced medicine for fifty years or more at a ceremony and reception on December 21. Twenty-six of forty-seven of these members were present.

One of ten winners of the 1955 Modern Medicine Award for Distinguished Achievement is **Carl V. Moore**, M.D., St. Louis, dean of Washington University School of Medicine.

Installation of **Arthur S. Bristow**, M.D., Princeton, as president of the Mississippi Valley Medical Association was held at Quincy, Illinois, late in November.

The board of the Central Missouri United Cerebral Palsy Association heard **Henry Guhleman**, M.D., Jefferson City, speak at the annual board meeting in Columbia on December 1.

The St. Louis Army Medical Depot, which has been the nation's largest medical supplies depot, will begin tapering off warehousing in mid 1955 and by the end of the year will have moved to Louisville, Kentucky, Army Medical Depot, it was announced on December 9.

The Missouri Division of the American Cancer Society will award twenty-three $300 nursing scholarships to high school students.

"Allergies" was the subject of a talk presented by **Ralph Hale**, M.D., Kansas City, at a meeting of the Greater Kansas City Association of Medical Record Librarians at St. Joseph's Hospital on December 6.

Construction work on the Medical Sciences Building of the University of Missouri was begun the second week in December.

The Missouri Society for Neurology and Psychiatry will hold a dinner meeting at Hotel President, Kansas City, on Monday evening, March 28.

At the November meeting of the Southern Medical Association in St. Louis, **Robert Bartlett**, M.D., St. Louis, was elected secretary of the Surgical Section for 1955.

The Oklahoma Academy of General Practice, meeting in Oklahoma City February 14 and 15, will hear **Robert M. Myers**, M.D., Kansas City, speak on "Infertility" and "The Routine Multipara."

Mr. Chester G. Starr, Jefferson City, retired from the Missouri Farm Bureau Federation effective December 31, after twenty-two years with the Federation. He has been in charge of the Rural Health Service of the organization.

NEW MEMBERS

Bikales, Victor W., M.D., Kansas City
Cochran, Thomas E., Jr., M.D., Kansas City, Kansas
Croom, Dorwyn W., M.D., Malden
Giesler, Donald H., M.D., Appleton City
Hanes, Robert L., M.D., Kansas City
Henry, Clarke L., M.D., Kansas City
Johnson, Charles R., M.D., Monroe City
Karraker, Alvan G., M.D., Farmington
Kuenzi, Donald E., M.D., Gashland
Lentz, William R., M.D., Hickman Mills
Love, Drury M., M.D., Kansas City
Pinsker, Oscar T., M.D., Kansas City
Roberts, Billy J., M.D., Mountain Grove
Schottman, Gerhard W., Jr., M.D., Kansas City
Stegman, Elmer G., M.D., Raytown
Wiley, Jason L., M.D., Kansas City

DEATHS

Bennett, Joseph S., M.D., Kansas City, a graduate of the University of Kansas School of Medicine, 1922; honor member of the Jackson County Medical Society; aged 68; died December 6.

Powers, Everett, M.D., Carthage, a graduate of the Jefferson Medical College of Philadelphia, 1896; honor member of the Jasper County Medical Society; aged 85; died December 6.

Norton, Harry B., M.D., Hannibal, a graduate of Drake University College of Medicine, Des Moines, 1910; member of the Marion-Ralls-Shelby County Medical Society; aged 69; died December 15.

Watkins, George L., M.D., Farmington, a graduate of Washington University School of Medicine; member of the Mineral Area Medical Society; aged 66; died December 25.

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1. American Medical Association: New and Nonofficial Remedies. J. B. Lippincott Co., Philadelphia, 1954, p. 147.

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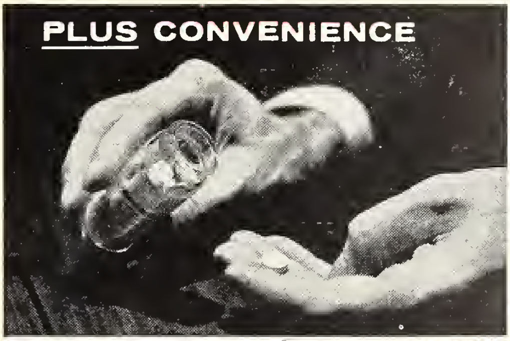

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MISSOURI STATE MEDICAL ASSOCIATION

The 97th Annual Session of the Missouri State Medical Association will be held in the Municipal Auditorium and Hotel President, Kansas City, March 27, 28, 29 and 30, 1955.

TIME AND PLACE OF MEETINGS

Sunday, March 27

12:30 p. m. Registration of Delegates, Hotel President.
1:30 p. m. House of Delegates, Junior Ball Room, Hotel President.
4:00 p. m. Reference Committee Meetings, Hotel President.

Monday, March 28

8:00 a. m. Registration, Municipal Auditorium.
8:30 a. m. Color Television, Little Theater, Municipal Auditorium.
10:00 a. m. Intermission to View Exhibits.
10:30 a. m. Scientific Session, Little Theater, Municipal Auditorium.
12:00 noon Round Table Luncheon, Hotel President.
1:45 p. m. Color Television, Little Theater, Municipal Auditorium.
2:45 p. m. Scientific Session, Little Theater, Municipal Auditorium.
3:15 p. m. Intermission to View Exhibits.
4:00 p. m. House of Delegates, Little Theater, Municipal Auditorium.
5:00 p. m. Reference Committee Meetings, Municipal Auditorium.

Tuesday, March 29

8:00 a. m. Registration, Municipal Auditorium.
8:30 a. m. Color Television, Little Theater, Municipal Auditorium.
10:00 a. m. Intermission to View Exhibits.
11:00 a. m. Scientific Session, Little Theater, Municipal Auditorium.
12:00 noon Round Table Luncheon, Hotel President.
1:45 p. m. Color Television, Little Theater, Municipal Auditorium.
2:45 p. m. Intermission to View Exhibits.
3:15 p. m. Scientific Session, Little Theater, Municipal Auditorium.
7:30 p. m. Annual Banquet, Ball Room, Hotel President.

Wednesday, March 30

8:00 a. m. Registration, Municipal Auditorium.
8:30 a. m. Color Television, Little Theater, Municipal Auditorium.
10:00 a. m. Intermission to View Exhibits.
10:30 a. m. Scientific Session, Little Theater, Municipal Auditorium.
1:30 p. m. House of Delegates, Little Theater, Municipal Auditorium.

SCIENTIFIC PROGRAM

Monday, March 28, 1955, Little Theater, Municipal Auditorium

8:30 a. m. Color Television.
10:00 a. m. Intermission to View Exhibits.
10:30 a. m. Management of Cancer of the Prostate, Elmer Hess, M.D., Erie, Pennsylvania.
11:00 a. m. Maternal Mortality Survey in Missouri, Gerald L. Miller, M.D., Kansas City, Missouri.
11:30 a. m. Management of Occiput Posterior, Clarence D. Davis, M.D., Columbia, Missouri.
12:00 noon Round Table Luncheon, Hotel President.
1:45 p. m. Color Television.
2:45 p. m. Treatment of Hypertension, Irvine H. Page, M.D., Cleveland, Ohio.
3:15 p. m. Intermission to View Exhibits.
4:00 p. m. House of Delegates.

Tuesday, March 29, 1955, Little Theater, Municipal Auditorium

8:30 a. m. Color Television.
10:00 a. m. Intermission to View Exhibits.
10:30 a. m. The Acute Abdomen, Philip Thorek, M.D., Chicago, Illinois.
11:00 a. m. The Effect of Mitral Valve Surgery on the Prognosis of Individuals With Mitral Stenosis, Louis A. Soloff, M.D., Philadelphia, Pennsylvania.

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11:30 a. m. Acute Renal Insufficiency (Lower Nephron Nephrosis), Francis D. Murphy, M.D., Milwaukee, Wisconsin.
12:00 noon Round Table Luncheon, Hotel President.
1:45 p. m. Color Television.
2:45 p. m. Intermission to View Exhibits.
3:15 p. m. The Nutritional Management of Infants and Children, Robert L. Jackson, M.D., Columbia, Missouri.
3:45 p. m. Surgical Correction of Funnel Chest (Pectus Excavatum), Rollins S. Hanlon, M.D., St. Louis.
4:15 p. m. Chest X-Ray in the Diagnosis of Lung Cancer, L. Henry Garland, M.D., San Francisco, California.

Wednesday, March 30, 1955, Little Theater, Municipal Auditorium

8:30 a. m. Color Television.
10:00 a. m. Intermission to View Exhibits.
10:30 a. m. Diabetes in Children: Prevention of Complications, Priscilla White, M.D., Boston, Massachusetts.
11:00 a. m. Medical Responsibility in Rehabilitation Programs, Robert Elman, M.D., St. Louis.
11:30 a. m. Cancer: An Evaluation of Surgical Treatment, George Crile, M.D., Cleveland, Ohio.
1:30 p. m. House of Delegates.

Capsule Clinics

IRVING A. WIEN, M.D.

- Calcium deficits tend to complicate acute pancreatitis, generalized peritonitis, massive infections of subcutaneous tissue (hospital gangrene) and burns during the slough and early granulation stages. Moyer, C. A.: Fluid Balance, A Clinical Manual, Year Book Publishers, Inc., Chicago, 1952.

- Abortion is the most common cause of acute lower abdominal pain in early pregnancy. The pain is the result of the active spontaneous contractions of the uterus or of one of the complications of an induced abortion. Klingensmith, P. O.: Surg. Clin. North America **32** (December) 1952.

- The normal act of defecation should empty the contents of the colon distal to the splenic flexure. Ferris, C. R.: MISSOURI MEDICINE **50** (September) 1953.

- In five cases of gastrointestinal hemorrhage in which banthine or pro-banthine were administered paralytic ileus followed. Ordinarily it has not occurred in the past unless shock, electrolyte imbalance, peritonitis or obstruction were present. Gunn, Jr., C. G., and Allen, M. S.: New England J. Med. **251** (October 21) 1954.

- Since 1946, the majority of patients with a pilonidal cyst have been treated by excision and primary closure following Pope's technic of musculofascial transplant to eradicate dead space. Swinton, N. W., and Markee, R. K.: Lahey Clin. Bull. **9** (July) 1954.

- Vitamin K_1 should only be used if hemorrhage has occurred as a result of anticoagulant therapy or if the reduction in the blood prothrombin level is so great that hemorrhage is very likely to develop. Toohey, M.: Brit. M. J. **1** (May 1) 1954.

- The exact pathogenesis of essential hypertension in man remains an unsolved problem. Despite a considerable body of clinical and laboratory information, no clear-cut evidence of its actual origin is known. Friedland, C. K.: Advance in Medicine and Surgery, Graduate School of Medicine, University of Pennsylvania, W. B. Saunders Co., Philadelphia, 1952.

- There are a number of conditions in which intermediate skin grafts are particularly useful: to cover large areas of body surface, to repair contractures of limbs, and to deepen the buccal sulcus. Barsky, A. J.: Principles and Practice of Plastic Surgery, Williams & Wilkins Co., Baltimore, 1950.

- Urine sugar tests are much less effective than blood sugar tests as a diabetic case finding procedure, and a fasting blood sugar is inadequate as a means for detecting a lowered glucose tolerance. Petrie, L. M., et al: Ann. Int. Med. **40** (May) 1954.

- It is generally accepted that a variable and sometimes small proportion of penicillin is absorbed after oral administration, and consequently this route is not recommended in the initial stage of acute severe infections. Fairbrother, R. W., and Daber, K. S.: Lancet **1** (April 24) 1954.

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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Grand River Medical Society

The Grand River Medical Society met December 9, 1954, at the Strand Hotel, in Chillicothe. There was a rather large attendance, both members and Auxiliary members.

Dr. **H. E. Petersen**, President of the Missouri State Medical Association, paid his yearly visit. Dr. Petersen made a fine speech on "What's New in Missouri Medicine" and later read an interesting paper on "Growth and Development in Children." We always enjoy Dr. Petersen's talks. He has a large acquaintance among our members in northwest Missouri.

Various guests were introduced along with the presentation of our 1955 officers: President, Dr. **Watkins A. Broyles**; first vice president, Dr. **John R. Dixon**; second vice president, Dr. **Frank R. Daley**, and secretary and treasurer, Dr. **E. A. Duffy**.

Dr. **John H. Platz**, retiring president, made an address in which he thanked all members for their fine cooperation and complimented them on their attendance at our meetings. He also mentioned that every member of our Society had paid their 1954 dues.

The banquet tables were appropriately decorated for Christmas presenting a beautiful appearance. Some time was devoted to the social hour.

E. A. DUFFY, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

W. F. FRANCKA, HANNIBAL, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

The annual dinner for wives and guests of the Chariton-Macon-Monroe-Randolph County Medical Society was held at the Merchant's Hotel, Moberly, Thursday night, December 9.

Some 150 people were in attendance at this gala affair.

Paul F. O'Brien, D.D.S., St. Louis, gave the main address of the evening. He spoke on "A Bushman's Holiday in British Honduras," which he illustrated by movies and slides. This talk referred primarily to a trip which Dr. and Mrs. O'Brien made to British Honduras in 1948, where the doctor made dental studies and treated the aching teeth of many of the natives in that Republic.

Dr. O'Brien also discussed the fluoridation of drinking water and its affect on dental decay.

This annual dinner and guest night of the Society has become an annual affair, which is looked forward to each year. The Society feels that this occasion serves as an excellent public relations project.

The doctors and their wives from the four counties invite, each year, personal guests from their own communities to attend the Christmas dinner meeting with them.

This year's affair was another delightful occasion.

W. D. CHUTE, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

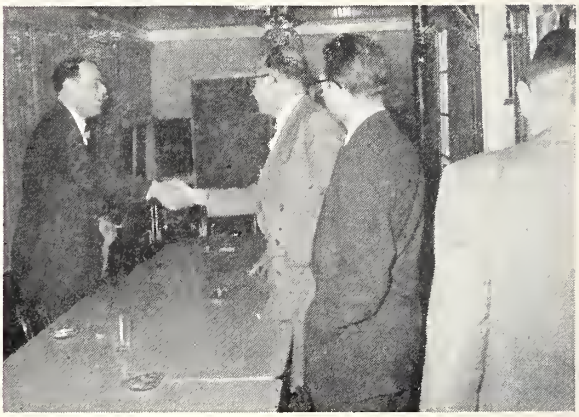
OTTO KOCH, BRENTWOOD, COUNCILOR

Lincoln-St. Charles County Medical Society

Francis Burns, M.D., St. Louis, spoke before the Lincoln-St. Charles Medical Society at a dinner meeting at the Southern Air, Wentzville, on Thursday night, January 6, 1955. He discussed "Diagnosis and Treatment of Common Rectal Disorders" and well illustrated the presentation with slides.

This program was presented under the auspices of the Missouri Academy of General Practice. Following the scientific part of the program, a short business session was held.

Meetings are well attended.



Dr. E. H. Burford, St. Louis addressed the December 2 meeting.

JOSEPH C. CREECH, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

J. LOREN WASHBURN, VERSAILLES, COUNCILOR

Audrain County Medical Society

The Audrain County Medical Society held a dinner meeting at the Audrain County Hospital on Monday night, October 18.

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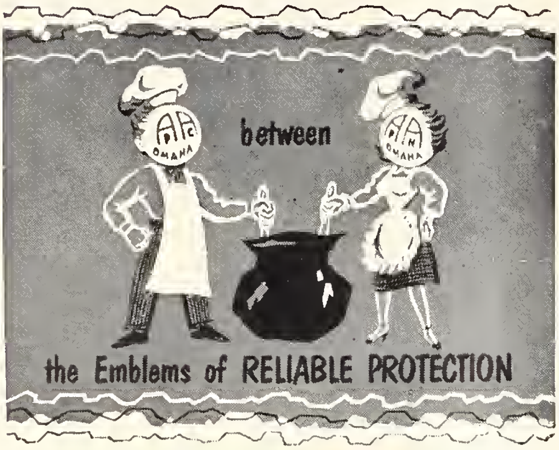
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Dr. **William Stewart**, Columbia, discussed "Doctors and Hospitals."

Those in attendance were: Dr. **J. O. Helm**, of New Florence, Dr. **A. R. McComas**, of Sturgeon; Dr. **J. Frank Jolley**, Dr. **William Jolly**, Dr. **Ben Jolly**, Dr. **Harry F. O'Brien**, Dr. **H. J. Ector**, Dr. **Glen P. Kallenbach**, Dr. **Charles Garcia**, Dr. **Harold D. Lankford**, Dr. **Kathyrn Epple** and Hospital Administrator James H. Moss, Mexico, and Dr. **R. N. Crews**, of Fulton.

KATHYRN EPPLE, M.D., *Secretary*

Meeting of December 13

At a dinner meeting of the Audrain County Medical Society at the County Hospital on Monday night, December 13, officers for the new year were elected. They are: Dr. **Ben Jolly**, Mexico, president; Dr. **William Jolly**, Mexico, vice president, and Dr. **Thomas Dwyer**, Mexico, secretary and treasurer.

The guest speaker for the evening was Dr. **D. K. Platt**, St. Louis, associated with Washington University, who spoke on "Hospital Laboratories."

KATHRYN EPPLE, M.D., *Secretary*

Postgraduate Course at Missouri University

The third session of the postgraduate series of six fall and winter meetings, currently being held at the University of Missouri Medical School under sponsorship of the Missouri Academy of General Practice and the State University School of Medicine, was held on Thursday night, December 16.

Some fifty physicians were in attendance to hear discussions on "Emergencies in the Newborn," by Dr. **W. R. Hepner**, Jr., Associate Professor of Pediatrics, University of Missouri; and "Urinary Obstructions in Children," by Dr. **James C. Cope**, Columbia, Clinical Associate in Urinology, University of Missouri.

Discussion caused the meeting to break up slowly.

The final three sessions of the course are to be held on January 20, February 17, and March 17.

Dr. **T. L. Dwyer**, Mexico, president-elect of the Missouri Academy of General Practice, presided at the December 16 meeting.

J. LOREN WASHBURN, M.D., *Councilor*

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

West Central Missouri Medical Society

On Thursday night, December 9, the West Central Missouri Medical Society and its Woman's Auxiliary

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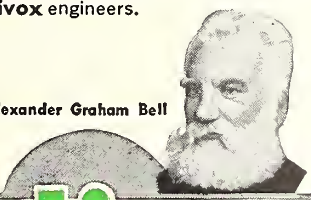

Alexander Graham Bell

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Successor to Western Electric Hearing Aid Division
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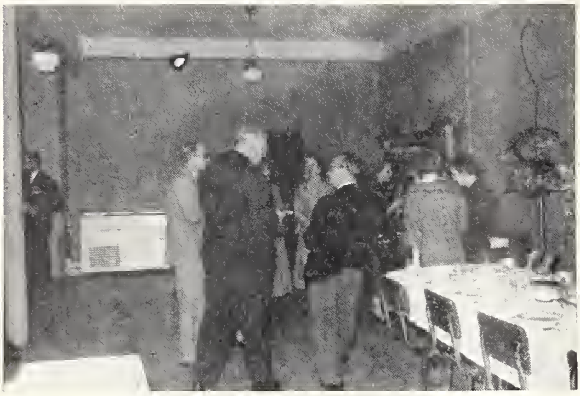
held its Christmas meeting at the Inn Hotel, Butler.

Thirty people were in attendance, including doctors, wives and guests.

The evening festivities began with a social hour, followed by the appropriate yuletide dinner; and, then, the scientific program which was given by Dr. **Gerald Miller**, Kansas City.



Discussion did not end with the formal presentation.

Dr. Miller spoke on "Obstetrical Emergencies." His discussion was interesting and practical.

During the business session, following the scientific talk, Mr. Ray McIntyre, Field Secretary of the State Association, was asked to discuss the proposed single licensure law.

Dinner was a part of the meeting.

Society officers for 1955 were elected at the close of the meeting. Dr. **O. B. Barger**, Harrisonville, was elected to serve as president for 1955, and Dr. **A. L. Hansen**, Butler, will serve as secretary and treasurer.

O. B. Barger, M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

WALTER S. SEWELL, SPRINGFIELD, COUNCILOR

Ozarks County Medical Society

The December meeting of the Ozarks Medical Society and its Woman's Auxiliary was held at the State Tuberculosis Sanatorium, Mount Vernon, on Tuesday night, December 14.

Dinner preceded the meeting.

Forty-nine persons were in attendance including doctors, their wives, and guests.

The scientific program for the evening was furnished by the Missouri Academy of General Practice in cooperation with St. Louis University Medical School and consisted of a panel discussion on "Recent Advances in the Treatment of Rheumatic Fever,"

An attentive audience listened.

The speakers spoke informally as well as formally.

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by **C. P. Lynxwiler**, M.D., **J. P. Murphy**, M.D., and **C. G. Vournas**, M.D., all of St. Louis.

This fine program was preceded by an excellent dinner served in the sanatorium dining room.

A short business session followed the scientific program. As one item of business, the society voted unanimously to request the Council of the State Medical Association through our Councilor, Dr. **W. S. Sewell**, Springfield, to add McDonald County to the present hyphenated Ozarks Society.

The next meeting of the society will be held in Monett, on Tuesday night, January 11.

Charles A. Spears, M.D., *Secretary*

Barton-Dade County Medical Society

On Tuesday evening, December 7, an interesting meeting of the Barton-Dade County Medical Society was held at Lamar. Those in attendance were privileged to her Dr. T. J. Martiny, of Odense, Denmark, discuss "The Advantages and Disadvantages of Socialized Medicine and Its Affect on the Social and Economic Life of Both the Patients and the Attending Physicians."

Dr. and Mrs. Martiny are on a visit to the United States to make a comparative study of medical policies and methods in the United States and in Europe.

A. R. Cain, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society

The December meeting of the Phelps-Crawford-Dent-Pulaski-Maries County Medical Society was held at the home of Dr. and Mrs. **E. A. Stricker**, St. James, on Thursday night, December 16.

The social hour and dinner were joint compliments of Dr. and Mrs. **Stricker** and Dr. and Mrs. **R. E. Breuer**, Newburg.

The scientific program for the evening, sponsored by the Missouri Academy of General Practice and the Staff of the Ellis Fischel Cancer Hospital, was a panel discussion on "Recent Trends in the Treatment of Cancer," by **Henry Schwarz, II**, M.D., **John Tinsley**, M.D., and **Jose Sala**, M.D., all of Columbia.

This was a most enjoyable occasion and ushered in the holiday season on the right key.

M. K. Underwood, M.D., *Secretary*

South Central Medical Society

The South Central County Medical Society met for dinner, Wednesday night, December 22, at the Aztec Club, southeast of Willow Springs, with the following members and visitors present: **Jack N. Wiles**, M.D., **C. F. Callihan**, M.D., and **M. L. Fowler**, M.D. of West Plains; **A. T. Walker**, M.D., of Mammoth Springs, Arkansas; **C. W. Cooper**, M.D., of Thayer; **Paul A. Davis**, M.D., **H. W. Miller**, M.D., and **M. B. Perkins**, M.D., Willow Springs; **B. J. Roberts**, M.D., and **A. C. Ames**, M.D., Mountain Grove; **Garrett Hogg, Jr.**, M.D., Cabool, and several of the wives.

After dinner, the ladies went home with Mrs. Ferkins for the evening, and Dr. Perkins, the president, called the meeting to order. The minutes of the last meeting were read and approved.

The application for membership of B. J. Roberts, M.D., Mountain Grove, was presented, and, as none of the board of censors was present, and he was well known, he was elected to membership.

Next was the annual election of officers and delegates. They are as follows: **C. W. Cooper**, M.D., Thayer, president-elect took over as president, and **J. W. Wiles**, M.D., was chosen president-elect, and **A. C. Ames**, M.D., was reelected secretary and treasurer.

Garrett Hogg, Jr., was elected censor for three years. The censors holding over are **Rollin H. Smith** for two years and **T. J. Burns** for one year.

The delegates and alternates are as follows: Howell County, **C. F. Callihan**, West Plains, and **A. H. Smith**, West Plains; Texas County, **T. J. Burns**, Houston, **Garrett Hogg, Jr.**, Cabool; Oregon County, **C. W. Cooper**, Thayer, **A. T. Walker**, Mammoth Springs, Arkansas; Wright County, **R. W. Denney**, Mountain Grove, **B. J. Roberts**, Mountain Grove; Douglas County, **M. C. Gentry**, Ava, no alternate; Ozark, **Deborah Doan**, Bakersfield, no alternate.

A. C. Ames, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Mineral Area County Medical Society

The December meeting of the Mineral Area County Medical Society was held at Farmington, December 9. Dr. Read Boles was the guest speaker and gave an informative talk about common pediatric problems. This was high lighted by the recounting of his experiences in the Malay Penninsula as a pediatric instructor.

The business meeting was begun by voting the donation of $25 to the National Society of Medical Research. The next order of business was the voting of Alvan G. Karraker, M.D., to society membership.

The election of officers was then held, and the following were elected for 1955: President, Dr. **C. J. Clapsaddle**, Ste Genevieve; vice president, Dr. **H. C. Gaebe**, Desloge; and secretary and treasurer, Dr. **C. E. Carleton**, Farmington.

The meeting was then adjourned.

Jack Mullen, M.D., *Secretary*

Dunklin County Medical Society

The Dunklin County Medical Society held a dinner meeting at the Dunklin County Memorial Hospital on Tuesday night, December 7.

Dr. **C. T. Edmondson**, Malden, was elected president for 1955. Other new officers elected were: Dr. **Jameso Fuzzell**, Kennett, vice president; Dr. **E. L. Spence**, Kennett, secretary and treasurer; Dr. **Paul Baldwin**, Kennett, Delegate to the State Medical Association; Dr. **W. D. English**, Cardwell, alternate, and Dr. **C. R. Peck**, Kennett, representative of the board of censors.

In recognition of their long service in the practice of medicine and of their membership in the Society, three members were made honorary members of the Society. They are: Dr. **A. T. Rutledge**, Kennett; Dr. **John Van Cleve**, Malden, and Dr. **Homer Beal**, Malden.

Dr. R. L. Palenke, who recently began practice at Hornersville, was a guest at the meeting.

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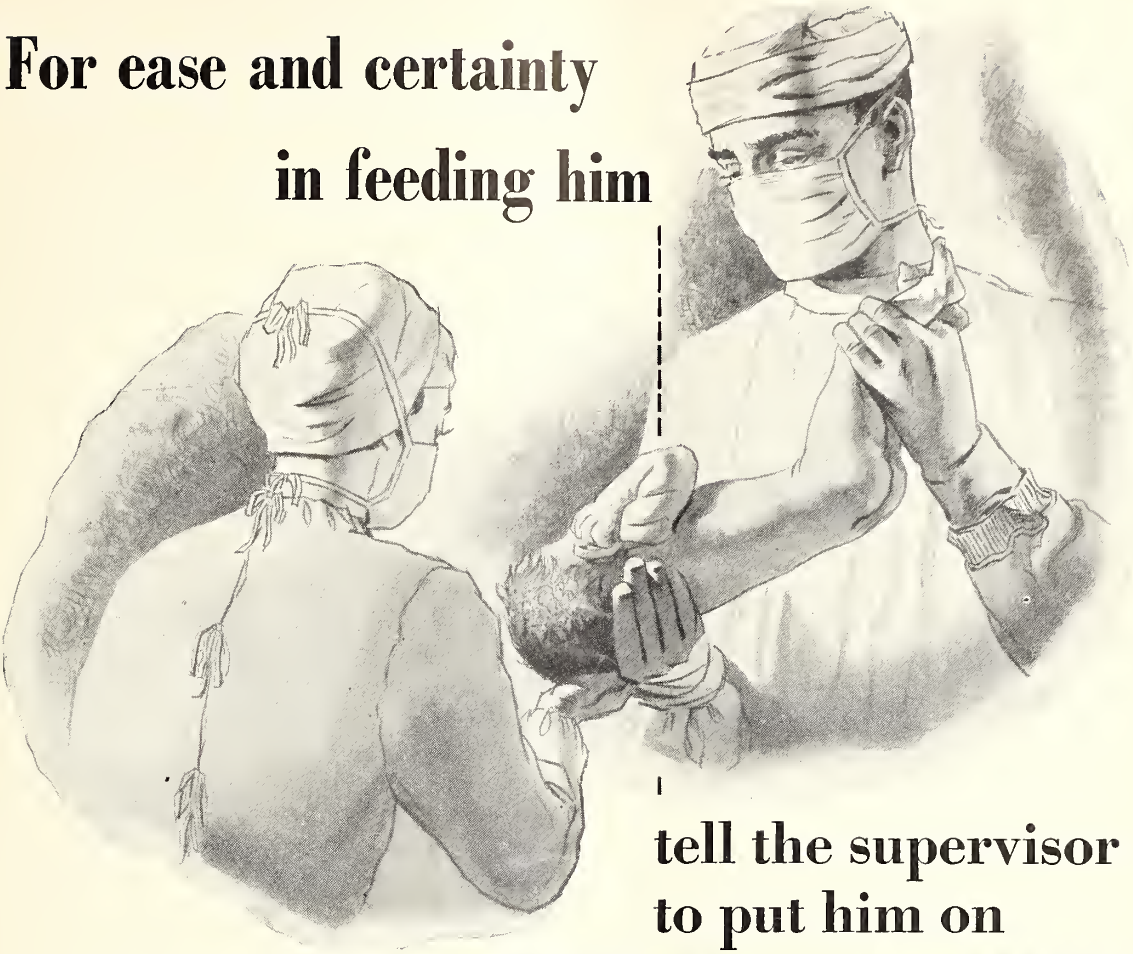

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News From the Medical Schools

UNIVERSITY OF MISSOURI

Dr. William T. Ellis, currently in the Department of Gynecology, Boston City Hospital, Boston, Massachusetts, will become Assistant Professor of Obstetrics and Gynecology, effective March 1, 1955.

On November 20, 1954 the Board of Curators awarded contracts totaling approximately three million dollars for the construction of a new Medical Sciences Building. This building, four stories in height, will house the administrative offices of the School of Medicine and the School of Nursing, the Nursing Arts Laboratories, student lounge areas, the animal house, service areas to the Medical School, the Departments of Anatomy, Biochemistry, Microbiology, Pathology, Physiology and Pharmacology, the Medical Sciences Library designed to house 100,000 volumes and an auditorium seating approximately 350 people. In addition to the teaching laboratories and classrooms for these departments, the Medical Sciences Building will likewise provide research facilities for these several departments, and will be constructed to the north of the teaching hospital now under construction, and connected to the teaching hospital by a three story corridor. Of simpler construction, it is estimated that the completion of the Medical Sciences Building will approximate that of the completion of the teaching hospital.

Architectural design on the Nurses Home, the third unit of construction in the University of Missouri Medical Center, is proceeding at the present time.

Dr. W. A. Sodeman, Chairman of the Department of Medicine, and Dr. Robert L. Jackson, Chairman of the Department of Pediatrics, participated in the Postgraduate Course on heart disease sponsored by the Missouri Heart Association in Camdenton, Missouri, on November 18 and 19. Dr. Robert L. Jackson, and Dr. Hugh E. Stephenson, Jr., Assistant Professor of Surgery, were speakers at the second program of the Postgraduate Series for physicians of Central Missouri held on the campus of the University of Missouri on November 18. Doctor Stephenson addressed the St. Louis Society of Anesthesiologists on December 16.

Dean Roscoe L. Pullen addressed the Rotary Club, Macon, Missouri, on November 24, on "The Progress of the University of Missouri Medical School," and was the principal speaker for the annual banquet of the Missouri Hospital Association meeting in St. Louis on December 3, speaking on the topic of "Trends Influencing Medical Practice."

Miss Dorothy L. Vorhies, Associate Professor of Dietetics, attended the Missouri Dietetic Association meeting in Jefferson City of November 20, and the Missouri Hospital Association meeting in St. Louis on December 2 and 3, and the meeting of the Northwest Area Hospital Council in Hannibal, Missouri, on December 9.

Dr. Robert L. Jackson, Professor and Chairman of the Department of Pediatrics, and Dr. W. R. Hepner, Jr., Associate Professor of Pediatrics, addressed the Southwest Pediatric Society in Kansas City on November 29. Dr. C. D. Davis, Chairman of the Department of Obstetrics and Gynecology; Dr. Robert L. Jackson, Chairman of the Department of Pediatrics; Dr. W. R. Hepner, Jr., Associate Professor of Pediatrics; Dr. M. Pinson Neal, Professor of Pathology, and Dean Roscoe L. Pullen were among those members of the Medical School faculty attending the annual meeting of the Southern Medical Association in St. Louis early in November. Miss Virginia Harrison, Acting Director of the School of Nursing, and Mrs. Katherine Mason, Assistant Director of the School of Nursing, attended the annual meeting of the Missouri League for Nursing in St. Louis on December 3 and likewise attended the annual meeting of the Missouri Hospital Association meeting on the same date. Miss Harrison is a member of the Board of Directors of the Missouri League for Nursing. Dr. Lloyd E. Thomas, Associate Professor of Biochemistry, attended panel meetings of the Committee on Growth of the National Research Council, held in Washington, D. C., December 9 to 13.

Five students of the second year class received the annual W. K. Kellogg Foundation awards of $100 each at a Student Assembly on December 1, 1954. The names of the students were: Robert William Buben; Donald E. Dickerson; James Spencer Gordon; Glennon Amos Horner and Erwin F. Soell. Dr. W. B. See, Assistant Professor of Obstetrics and Gynecology, was elevated to Fellowship in the American College of Surgeons at the recent meeting of that organization in Atlantic City, N. J.

Dr. Elmer D. Bueker, Associate Professor of Anatomy, has received a grant of $12,989.00 from the United States Public Health Service for the period January 1, 1955, to December 31, 1955, for research on "Microsome Derivatives of Neoplastic Cells."

WASHINGTON UNIVERSITY

Officers were elected for the Washington University Medical Society at a meeting December 2. The new officers are: President, Dr. Harvey L. White, professor of physiology and head of the department; vice president, Dr. Margaret G. Smith, associate professor of pathology, and secretary, Dr. Carl G. Harford, associate professor of medicine. New council members for the Society include Dr. Virgil Loeb, Jr., assistant professor of medicine; Dr. David H. Brown, assistant professor of biological chemistry; and Dr. Donald A. Thurston, assistant professor of pediatrics.

Dr. Jack L. Strominger, assistant professor of pharmacology, has been awarded a $30,000 five-year scholarship by the John and Mary R. Markle Foundation to continue his research in this country and abroad, the Foundation announced December 13. Dr. Strominger, a graduate of Yale University School of Medicine, interned at Barnes Hospital in 1948 and spent the next three years learning the micro-chemical technics of Dr. Oliver Lowry, professor of pharmacology and head of the department at the medical school. Since 1952 he has continued related studies at a research agency connected with the Bethesda (Md.) Hospital group. Dr. Strominger plans to study abroad a year before resuming his research here in January 1956.

Dr. Harvey L. White, professor of physiology and head of the department, was invited to be the George Cyril Graves Lecturer in Physiology at the University of Indiana School of Medicine at Bloomington, Ind. Dr. White was in Bloomington January 10 to 19, where he talked to the staff and students of the Indiana School of Medicine on the general topic "Some Aspects of Renal Physiology." The George Cyril Graves Lectureship in Physiology was established as an annual lectureship in 1948, honoring Dr. Graves, who, in 1940, bequeathed his entire estate to the physiology department of Indiana University.

Dr. Perry B. Hudson, chief of urology at Delafield Hospital in New York City, was the guest speaker at a urology seminar presented January 17 under the auspices of the section on urology, department of surgery of Washington University School of Medicine. Dr. Hudson reported on "Early Diagnosis and Surgical Treatment of Prostatic Carcinoma."

The Southern Society of Cancer Cytology of Miami, Fla., informed Dr. Edmund V. Cowdry during their St. Louis meeting in November that he had been elected an honorary member of their Society. Dr. Cowdry is research professor emeritus and lecturer in anatomy and director of the Wernse Laboratory of Cancer Research.

Dr. Horace Mitchell Perry, instructor in medicine, recently discussed hypertension at several medical meetings. On October 26 Dr. Perry spoke at a meeting of the Greene County Medical Society in Carrollton, Ill., where he reported on "Newer Concepts in the Treatment of Hypertension." He also was one of three discussants for a symposium on the problems of hypertension at a regional clinical conference of the Illinois Heart Association November 4 at Flora, Ill.

Dr. Willard M. Allen, professor of obstetrics and gynecology, was a guest speaker at the annual meeting of the Southwestern Medical Association held November 17 to 19 in El Paso, Texas. Dr. Allen and Dr. M. Digby Leigh, of Los Angeles, led an informal discussion on "Obstetrical Anesthesia" November 17. Dr. Allen also reported on "Bleeding During Pregnancy" and "Cesarian Sections."

Dr. Louis T. Byars, associate professor of clinical surgery, reported on the "Extent of Mandibular Resection Required in Treatment of Oral Cancer" December 4 at the 62nd annual meeting of the Western Surgical Association which met December 2 to 4 in Colorado Springs.

A report on treatment and possible origin of chronic ulcers of the leg was given by Dr. Carl A. Moyer, Bixby professor of surgery and head of the department, December 7 at the 66th annual session of the Southern Surgical Association. The group met December 7 to 9 at Hollywood Beach, Fla. The paper, "Stasis Ulcers: An Evaluation of the Effectiveness of Three Methods of Therapy and the Implication of Obliterative Cutaneous Lymphangitis as a Credible Etiologic Factor," was prepared by Dr. Moyer and Dr. Harvey R. Butcher, Jr., instructor in surgery.

Dr. Robert L. Lam, assistant professor of neurology, spoke for the Men's Division of the Norbury Sanatorium, Jacksonville, Ill., December 7. His subject was "The Differentiation of Relative Degrees of Organic and Functional Components in Diseases of the Nervous System."

ST. JOHN'S HOSPITAL HOLDS ANNUAL DINNER

At the 17th annual Christmas dinner for the doctors of St. John's hospital, St. Louis, on Thursday evening, December 9, in the hospital dining room, Dr. Leo Bartels, chairman of the affair (center) talks to the two honored guests, Dr. James J. Commerford, Crystal City, Mo. (left) and Dr. Augustus P. Munsch, St. Louis. Dr. Commerford served his internship at St. John's in 1909-1911 when the institution was located at 23rd and Locust, and Dr. Munsch has been associated with the hospital for fifty years.

Some 200 doctors and special guests attended the dinner which is given annually as a gesture of appreciation by the Sisters of Mercy who have conducted St. John's Hospital since its establishment in 1871.

Missouri Academy of General Practice

(Continued from page 96)

recognize that some change must eventually be made.

Many men, doctors practicing in rural areas particularly, do not understand the full meaning of the program of general practice. It is a misconception based upon inadequate information for doctors to feel that this organization represents a unionization for combating fellow practitioners or otherwise flexing our muscles in any manner which is detrimental to the over-all service which the doctor renders to his community. The real purposes of this large organization are: To improve our own medical status by insisting on regular and continuous postgraduate education and to clarify qualifications and obtain certain hospital privileges so that its members may care for patients in these hospitals without being forced to refer them unnecessarily to their specialist friends. If these two objectives are obtained, especially the former, the only one which concerns most of the rural practitioners, the more useful we may become to the community in which we practice.

At this time may I suggest to those of you who have not yet become members of this organization that you apply for membership and with all sincerity make your best efforts to fulfill the requirements for sustained membership?

Rural Medicine in Missouri

(Continued from page 139)

I feel that this is an excellent opportunity for me, as a rural doctor, to encourage you people who are leaders in your community to try the American method and solve health problems on a local basis insofar as possible. No amount of federal legislation will ever accomplish this any more than it helped my grandfather, who took an ax in hand and looked up to a white oak forest and said "I'm going to make a fertile field out of that land." It took courage and initiative to do that. I have wondered sometimes if my grandfather's grandchildren have not lost something along the way and become a bit bilious with some of the doctrine of federal aid to solve everything. Grandfather was an American and his toughness of spirit came a great deal from the necessity of solving his own problems.

Musings of the Field Secretary

(Continued from page 143)

be considered: Farm and Home Safety; Family Responsibility for Health; Using our Present Health and Medical Care Resources. It should be remembered that this conference is held in cooperation with agricultural leaders and national farm organizations.

An informal preconference session for members of the medical profession will be held Thursday morning, February 24, beginning at 10:00 a.m. This meeting will be devoted to discussions pertaining to work of the various medical association committees handling rural health activities. The emphasis, this year, will be placed on "Preparation for Country Practice." There should be some interesting ideas presented on this one.

Mr. Arthur Nebel, Director of the School of Social Work, University of Missouri, is the State Chairman for the 1955 Heart Fund Campaign in February. "Art" is well known to many physicians over this state, particularly through his capable directorship of the Missouri State Crippled Children's Service, which he recently left for his present position at the University. The Missouri Heart Association is fortunate to have "Art" Nebel as the directing light in its 1955 fund raising activities.

BOOK REVIEWS

Films in Psychiatry, Psychology and Mental Health by Adolf Nichtenhauser, M.D., Marie L. Coleman, David S. Ruhe, M.D., Medical Audio-Visual Institute of the Association of American Medical Colleges. Published by Health Education Council, New York, Minneapolis. First Edition. $6.00.

The aim of this book is to "make films in psychiatry, psychology and mental health education more useful to more people," and is the result of a study by the Medical Audio-Visual Institute of the Association of American Medical Colleges. In it, fifty-one films of major interest are discussed in detail, and fifty additional titles are also listed in an appendix.

The fifty-one films discussed in detail cover a wide range of subjects, including child care and development, symptoms of various types of psychopathology, psychotherapeutic interviewing and others. Most of these should be of interest to both lay and professional groups, though some are of more limited technical interest.

Each film review includes a résumé which briefly summarizes the content and appraisal of the film, and with suggestions of the types of audiences for whom the film would be suitable. Also cited are production and distribution data, and recommended supplementary material, such as study guides and film strips. Information about running time, distribution sources, and expense is provided for each film.

These reviews are intended to make unnecessary the expenditure of time and money for obtaining and previewing these films for the sole purpose of deciding whether or not they would be suitable for the intended use. Toward this end, each review discusses the purpose and objectives of the film, the treatment of the subject, an appraisal of technical content, the film style used, the effectiveness of the film and its optimum utilization for appropriate groups.

Since many of the films reviewed in this volume are well-known and of proven value and interest, this book should be a useful adjunct in the teaching of medical students, others in the medical fields, technical personnel in related fields, as well as in mental hygiene programs addressed to the lay public.

Thoracic Surgery by Richard H. Sweet, M.D., Associate Clinical Professor of Surgery, Harvard University Medical School. Illustrations by Jorge Rodriguez Arroyo, M.D., Formerly Assistant in Surgical Therapeutics, University of Mexico Medical School. Second Edition. W. B. Saunders Company, Philadelphia. 1954. Price $10.00.

After a period of four years with necessary revision of the first edition of the volume on chest surgery this second edition has been published. The text consists of eleven chapters, the first chapter being devoted to the surgical anatomy of the thoracic cage and its viscera. Operative technic is given considerable emphasis with the preoperative and postoperative management of varying surgical conditions being well outlined.

As a result of the impact and progress in cardiovascular surgery during the past number of years this second edition describes various procedures on the heart and the greater vessels. One of the most important sections in this edition is the discussion on cardiac arrest and resuscitation. Various causes of cardiac standstill and their resultant treatment are discussed.

Fundamentals of Otolaryngology. A Textbook of Ear, Nose and Throat Diseases, by Lawrence R. Boies, M.D., Clinical Professor of Otolaryngology; Director of Division of Otolaryngology, University of Minnesota Medical School. Second Edition. Illustrated. W. B. Saunders Company, Philadelphia. 1954. Price $7.00.

Like the first edition, this second edition is an excellently written book for the medical student and general practitioner. It is also good up-to-date review for the specialist in otolaryngology.

The book is divided into three parts: the ear, the nose and the throat. Each part has chapters on anatomy, examination and diseases. Every chapter is well written and covers the subject thoroughly.

The entire work cannot be recommended too highly.

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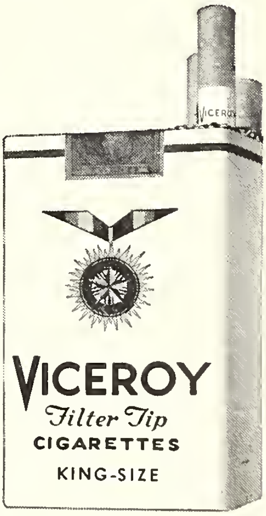

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The American Medical Association will present the first "Videclinic" over a closed circuit television network to thirty-two cities across the nation on February 9.

The "Videclinic" is a one and one half hour, black and white, televised postgraduate medical education program presented for the exclusive viewing of all practicing physicians, residents, interns and senior medical students. The subject of this initial "Videclinic" will be coronary disease, discussed and clinically demonstrated by twelve of the country's foremost heart specialists.

Both Kansas City and St. Louis will receive the program at 8:00 p.m. CST, and the Jackson County Medical Society and the St. Louis Medical Society, respectively, will be the hosts at the telecasts. It will be received in Kansas City at the Muehlebach Hotel and in St. Louis at the Auditorium of the St. Louis Medical Society.

The production and all physcial arrangements for the telecast, such as renting meeting facilities, setting up closed circuit TV lines and large screen receivers, are being handled and financed by Smith, Kline & French Laboratories of Philadelphia as a service to the medical profession.

Medical societies in the 32 cities selected to receive the "Videclinic" are being assisted with the promotion of this program by the American Medical Association and SKF. Many county societies are arranging to hold their February meetings on February 9 in order to take maximum advantage of this "Videclinic."

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Cook County Graduate School of Medicine

INTENSIVE POSTGRADUATE COURSES

Starting Dates, Spring 1955

SURGERY—Surgical Technic, Two Weeks, February 21, March 7
- Surgical Technic, Surgical Anatomy & Clinical Surgery, Four Weeks, March 7
- Surgical Anatomy & Clinical Surgery, Two Weeks, March 21
- Surgery of Colon & Rectum, One Week, February 28
- Basic Principles in General Surgery, Two Weeks, March 28
- General Surgery, Two Weeks, April 25; One Week, May 23
- Gallbladder Surgery, Ten Hours, April 11
- Fractures & Traumatic Surgery, Two Weeks, March 14

GYNECOLOGY—Office & Operative Gynecology, Two Weeks, March 14
- Vaginal Approach to Pelvic Surgery, One Week, March 7

OBSTETRICS—General & Surgical Obstetrics, Two Weeks, February 28

MEDICINE—Two-Week Course, May 2
- Electrocardiography & Heart Disease, Two Weeks, March 14
- Gastroenterology, Two Weeks, May 16
- Gastroscopy, Two Weeks, March 21
- Dermatology, Two Weeks, May 9

RADIOLOGY—Diagnostic Course, Two Weeks, February 28
- Clinical Uses of Radio Isotopes, Two Weeks, April 25
- Radium Therapy, One Week, May 23

PEDIATRICS—Intensive Course, Two Weeks, April 4
- Clinical Course, Two Weeks, by appointment
- Cerebral Palsy, Two Weeks, June 20

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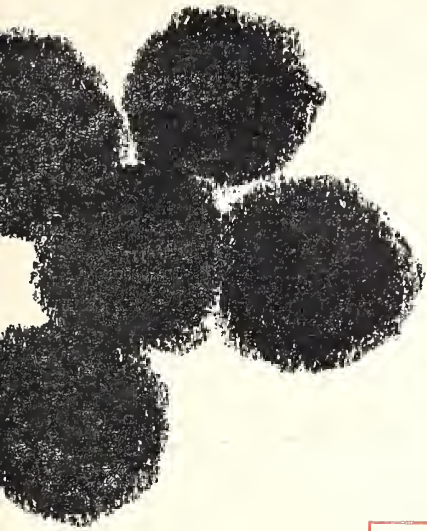

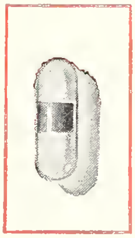

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*Pratt, R., & Dufrenoy, J.: Texas Rep. Biol. & Med. *12*:145, 1954.

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Annual Session, Atlantic City, June 6-10, 1955

MISSOURI STATE MEDICAL ASSOCIATION

97th Annual Session, Kansas City

March 27-30, 1955

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Delegates to the American Medical Association

Paul Baldwin, Kennett, 1952-1954. Arthur S. Bristow, Princeton, 1952-1954; alternate, W. J. Shaw, Fayette. F. L. Feierabend, Kansas City, 1953-1955; alternate, Rolla B. Wray, Nevada. Joseph C. Peden, Sr., St. Louis, 1953-1955; alternate, Walter Baumgarten, St. Louis. Beginning January 1, 1955, Delegates will be: Durward G. Hall, Springfield, 1954-1956; alternate, Guy N. Magness, University City. A. S. Bristow, Princeton; alternate, W. J. Shaw, Fayette. F. L. Feierabend, Kansas City, 1953-1955; alternate, Rolla B. Wray, Nevada. Joseph C. Peden, Sr., St. Louis, 1953-1955; alternate, Walter Baumgarten, St. Louis

Standing Committees

Scientific and Postgraduate Work—Maxwell G. Berry, Kansas City, Chairman (1957); Alphonse McMahon, St. Louis (1957); Roy W. Pearse, Jr., Nevada (1957); M. Pinson Neal, Columbia (1956); William P. Maddux, Springfield (1955). **Associate Members**—Michael S. Wepprich, Washington; Chester L. Clark, Trenton; Allen I. Herman, St. Joseph; Charles F. Wilson, Cape Girardeau; Peter V. Siegel, Smithton; Carroll P. Hungate, Kansas City; Eugene M. Bricker, St. Louis; Charles E. Martin, St. Louis.

Publication—Vincent T. Williams, Kansas City, Chairman; R. O. Muether, St. Louis; Paul O. Hagemann, St. Louis; M. D. Overholser, Columbia; John P. Ferguson, Springfield.

Defense—C. E. Hyndman, St. Louis, Chairman (1957); James H. O'Neil, Kansas City (1956); Roland S. Kieffer, St. Louis (1956); O. B. Zeinert, St. Louis (1955); L. P. Forgrave, St. Joseph (1955).

Public Policy and Public Relations—Jerome I. Simon, St. Louis, Chairman; T. E. Potter, St. Joseph; T. J. Hoerchler, Shelbina; Russell J. Crider, St. Charles; J. W. Allee, Columbia; Rolla B. Wray, Nevada; Ralph Perry, Kansas City; O. B. Crawford, Springfield; H. W. Carrington, Lebanon; D. Rusby Seabaugh, Cape Girardeau; H. E. Petersen, St. Joseph; Victor B. Buhler, Kansas City; W. F. Francka, Hannibal. (1955.)

Medical Education and Hospitals—W. J. Ferguson, Sikeston, Chairman (1955); Ralph R. Coffey, Kansas City (1957); Harry K. Purcell, St. Louis (1956); John J. Modlin, Columbia (1956); M. K. Underwood, Rolla (1955). **Associate Members**—M. E. Grimes, St. Joseph; George J. L. Wulff, University City.

Cancer—E. C. Ernst, St. Louis, Chairman (1956); E. Kip Robinson, Kansas City (1957); Joseph L. Fisher, St. Joseph (1957); Marvin L. Napper, Springfield (1955); Thomas Martin, St. Louis (1955). **Associate Members**—Jack H. Hill, Kansas City; Frederick J. McCoy, Kansas City; George A. Carroll, St. Louis; George L. Watkins, Farmington; C. W. Meinershagen, Jefferson City; A. N. Arneson, St. Louis.

Medical Economics—A. P. Rowlette, Moberly, Chairman (1955); Arthur B. Smith, Kansas City (1957); E. A. Stricker, St. James (1957); Charles R. Doyle, St. Louis (1956); E. Royse Bohrer, Jefferson City (1955). **Associate Members**—J. H. Trolinger, Jackson; John R. Forgrave, St. Joseph.

Mental Health—Thomas Thale, St. Louis, Chairman (1955); W. J. Cremer, Fulton (1957); Ernest H. Parsons, St. Louis (1956); G. Wilse Robinson, Jr., Kansas City (1956); John M. Sartin, Springfield (1955). **Associate Members**—Henry V. Guhleman, Jr., Jefferson City; Orr Mullinax, St. Joseph.

Maternal Welfare—Kenneth E. Cox, Kansas City, Chairman (1956); Joseph L. Johnston, Springfield (1957); E. E. Wadlow, St. Joseph (1956); E. Lee Dorsett, St. Louis (1955); Leo J. Hartnett, St. Louis (1955). **Associate Members**—G. L. Miller, Kansas City; William See, Columbia; James E. Keeler, Kansas City; Helman C. Wasserman, St. Louis; John E. Burch, Joplin; Francis R. Burns, Hannibal; Charles M. Grace, Chillicothe.

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Health and Public Instruction—A. W. McAlester, III, Kansas City, Chairman (1956); Edgar A. Belden, Jefferson City (1957); Henry C. Willumsen, St. Joseph (1957); John T. Crowe, Cape Girardeau (1956); J. Earl Smith, St. Louis (1955).

Constitution and By-Laws—Paul Baldwin, Kennett, Chairman (1955); W. A. Bloom, Fayette (1957); Curtis H. Lohr, St. Louis (1956); H. M. Parker, Kansas City (1956); W. L. Allee, Eldon (1955).

Fractures—Jacob Kulowski, St. Joseph, Chairman (1957); W. J. Stewart, Columbia (1957); Paul W. Meyer, Kansas City (1956); Vilray P. Blair, St. Louis (1956); Daniel L. Yancey, Springfield (1955). **Associate Members**—Henry C. Bauman, Maryville; B. L. Murphy, Hannibal; Thomas G. Otto, Cape Girardeau; Ralph K. Earp, St. Louis; O. P. Hampton, St. Louis.

Conservation of Eyesight—C. Souter Smith, Springfield, Chairman (1955); Robert S. Minton, St. Joseph (1957); A. N. Lemoine, Kansas City (1956); H. B. Stauffer, Jefferson City (1956); Robert D. Mattis, St. Louis (1955). **Associate Members**—John McLeod, Kansas City; G. J. Tygett, Cape Girardeau; George Hornback, Hannibal; C. H. Brady, Sedalia; Theodore Sanders, St. Louis; D. E. Eggleston, Macon; A. A. Drake, Rolla; William B. Wilcoxen, Bowling Green; W. L. Post, Joplin.

Control of Venereal Disease—E. M. Cannon, St. Louis, Chairman (1955); William B. O'Connor, St. Joseph (1957); James C. Cope, Columbia (1956); Charles C. Dennie, Kansas City (1956); A. W. Neilson, St. Louis (1955). **Associate Members**—R. J. Murphy, Kansas City; W. L. Davis, Charleston.

Industrial Health—H. M. Roebber, Bonne Terre, Chairman (1957); Albert H. Muench, St. Joseph (1957); S. W. Scorse, Joplin (1956); Vencel W. Hollo, St. Louis (1955); F. L. Feierabend, Kansas City (1955).

Diabetes—William H. Olmsted, St. Louis, Chairman (1955); Charles M. Lamke, Columbia (1957); Henry E. Oppenheimer, St. Louis (1957); Lucien W. Ide, St. Joseph (1956); Ira C. Layton, Kansas City (1955). **Associate Members**—Vincent J. LoPiccolo, St. Louis; Robert E. Koch, Clayton; Ralph H. Jones, Marshall; Byron M. Stuart, Boonville.

Anesthesiology—Merritt H. Kimball, Kansas City, Chairman (1955); Carl K. Ness, St. Joseph (1957); W. W. Tillman, Springfield (1957); R. M. S. Barrett, St. Louis (1956); Joseph A. McNearney, Richmond Heights (1955). **Associate Member**—O. T. Blanke, Joplin.

Hospital and Professional Relations—Hollis Allen, St. Louis, Chairman (1955); Stanley S. Peterson, Springfield (1957); Charles M. Waggoner, Columbia (1957); Paul N. Johnstone, Kansas City (1956); Milton Shoss, Cape Girardeau (1955).

Laboratory Medicine—Richard V. Riddell, St. Joseph, Chairman (1956); B. C. Portuondo, St. Louis (1957); Henry C. Allen, St. Louis (1956); Omer E. Hagebusch, St. Louis (1955); Jack H. Hill, Kansas City (1955).

Special Committees

Tuberculosis—Paul Murphy, St. Louis, Chairman; I. J. Flance, St. Louis; E. E. Glenn, Springfield; Laurence E. Wood, Kansas City; J. L. Mudd, St. Louis; C. A. Brasher, Mount Vernon; W. P. McDonald, St. Joseph; F. E. MacInnis, Kansas City; H. L. Greene, Hannibal. (1955.)

Study of Cardiac Disease—E. Lee Shrader, St. Louis, Chairman (1956); E. J. McIntire, Carthage (1957); A. M. Estes, Cape Girardeau (1957); H. W. Carle, St. Joseph (1955); V. Bryce Ballard, Kansas City (1955). **Associate Members**—Earl L. Loyd, Jefferson City; W. I. Park, Springfield; G. R. Hudson, Kirksville; Arthur E. Strauss, St. Louis; J. Will Fleming, Moberly.

Alcoholism—Ralph E. Duncan, Kansas City, Chairman; S. D. Smith, Columbia; Kenneth C. Coffelt, Springfield; Joseph B. Kendis, St. Louis; George W. Forman, St. Joseph; Richard W. Maxwell, University City.

Rural Medical Service—A. E. Spelman, Smithville, Chairman; Francis L. Kozal, Belle; W. A. Broyles, Bethany; W. J. Shaw, Fayette; Joseph C. Creech, Troy; Charles H. Lewellen, Louisiana; C. A. McBurney, Slater; A. J. C. McCallum, Aurora; John J. Killion, Portageville.

Physical Medicine—D. Elliott O'Reilly, St. Louis, Chairman (1955); Herbert A. Hamel, Kansas City (1957); Horace E. Thomas, Columbia (1957); R. A. Ritter, Cape Girardeau (1955); Luke A. Knese, St. Louis (1956).

Curiosa et Trivia

William B. McCunniff, M.D.

Of about 2,000,000 known species of animals, only fifty are domesticated and eaten; only 600 of the 250,000 known species of vegetables are cultivated.

A recent study shows that 64 per cent of American families have a family doctor, but only 47 per cent have a family dentist.

And you think you're tired! The average heart beats 16,200 times a day, and pumps 4,320 gallons of blood through about 60,000 miles of blood vessels. All this with *(Deo gratias)* no 40 hour week, no holidays, and no vacations with pay!

We know how you feel with yours, but there are about five hundred million other colds in the U.S. every year. They account for an estimated work loss of about 150 million work days . . . but for production-wise manufacturers of vaporizers, an increase of about 45 per cent in sales in 1954. They estimate that there are about eight million vaporizers in use in this country.

A Negro bass fiddle player in Harry Anderson's Orchestra, Daniel Hale Williams, was first heard from as a barber in Janesville, Wisconsin, in 1870. Not content in Anderson's "Tonsorial Parlor and Bathing Rooms," he was apprenticed to a physician and was graduated from Chicago Medical College. In July, 1893, at Provident Hospital in Chicago he performed the first recorded cardiac surgery when he sewed up the heart of James Cornish, a stabbing victim. The patient lived twenty years postoperatively. Another similar patient of his lived fifty years.

The University of Pennsylvania conferred on John Archer in 1768 the first medical diploma to be awarded after a course of study in America.

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Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

The members of the Howell County Medical Society recently decided at a regular meeting that they would discontinue their professional cards in the newspapers.

The quarter centenary of the birth of Andreas Vesalius, December 31, 1514, was celebrated in St. Louis by a loan exhibit of books, pamphlets, portraits, pictures and other objects illustrating the history of medicine. A list of the exhibits is published in the state journal. It includes the rare Salernitana of Dr. E. C. Streeter of Boston.

The J.A.M.A., January 2, 1915, reports: (1) "Medicinal benzene has been used in the treatment of leukemia. In many cases the improvement is such as to suggest an apparent cure. A large number, if not all, cases relapse or succumb to the toxic action of the benzene." (2) "Experiments conducted by A. J. Carlson and his coworkers at the University of Chicago show that the widespread use of bitter drugs as a means of stimulating the appetite or aiding digestion is a therapeutic fallacy. Such drugs as gentian, quassia, calumba, hops, condurango and elixir of quinin, strychnin and iron do not increase hunger contractions of the stomach and the related phenomenon nor induce increased secretion of hydrochloric acid or pepsin."

At the meeting of the Marion County Medical Society, Dr. W. T. Coughlin, of St. Louis, gave reasons why physicians do not hold that respect and confidence of the people which they deserve. He spoke of the evil of conflicting expert testimony. He said charges should be high enough to command respect. That physicians should not criticise one another but should have confidence in and respect for each other and be ever ready to fight each other's battles. He thought the greatest evil was too many doctors not sufficiently educated or adapted to the work they have chosen.

TWENTY-FIVE YEARS AGO

February 11 marked the twenty-fifth anniversary of the Council of Pharmacy and Chemistry of the American Medical Association. W. A. Puckner, secretary, has rendered continuous service as a full-time officer for the body from the very first.

On February 4, Dr. Guy Lincoln Noyes, Columbia, dean of the medical school of the State University, was claimed by death after a long illness. The University Hospital at Columbia will be named the Noyes Hospital in his honor.

Dr. J. W. Horner, Alma, who is over 70 years of age, has attended twelve of the last sixteen meetings of the Lafayette County Medical Society. When the meetings are held in Higginsville, Dr. Horner must travel 26 miles; when in Lexington, 52 miles; and when in Odessa, 60 miles. Dr. Horner has traveled 550 miles to attend these twelve meetings.

The Fifth International Congress of Physiotherapy will be held in Liege, September 14 to 18, 1930, in connection with the Celebration of the Centenary of the Independence of Belgium.

The Hebrew Physician, the only medical journal published in Hebrew outside of Palestine, has issued its second number. It is edited by Drs. Moses Einhorn and L. M. Herbert with offices at 983 Park Avenue, New York City. A copy of a manuscript on hemorrhoids written in 1265 A.D. by Shlomo Eben Ayub, of Badrash, France, is a feature of this issue.

TEN YEARS AGO

The 1945 Annual Session of the Missouri State Medical Association, which was scheduled to be held in St. Louis, April 22, 23, and 24, has been cancelled in accordance with the ruling of the Office of Defense Transportation. The cancellation includes the House of Delegates.

Missouri Doctors in Service: Captain Edward N. Zinschlag, Glendale, was among volunteers who were sent to the relief of troops at Bastogne, Belgium, by glider. Dr. Karl Dietrich, Columbia, has been promoted to a major. Lt. Col. George C. Bess, St. Louis, has been given the second Distinguished Service Badge. Major John A. Growdon, Kansas City, was awarded the Bronze Star with a citation. Lt. Comdr. Marcel I. Mooney, Kansas City, has been awarded the Bronze Star with a citation. Navy Lt. Sol Weisman, St. Louis, has received the Bronze Star for meritorious achievement in the Saipan and Tinian campaigns.

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Missouri Academy of General Practice

KENNETH GLOVER, M.D.

In the postgraduate courses sponsored by the Missouri Academy of General Practice, the busy practitioner who is expected to attend these meetings each month in turn is interested in certain instructional gems. Some of the papers have a great deal of scientific value. These represent recent trends in therapy or care of the patient and are valuable additions to the general practitioner's armamentarium. Fortunately, many of these papers have been of this type and the presenting speakers are to be congratulated on their forceful and clear presentation of the subject matter. Occasionally, however, a subject is presented which is highly technical, whose merits are debatable and which is of little practical value to the general practitioner. The reaction of the busy doctor who has left his work undone at home to attend such a meeting is quite unfavorable. For this reason, some of the speakers and their subjects have been graded by a member chosen by the central office of General Practice. This should serve to encourage a more practical type of program without offending the generous speaker who has made the program possible. If the subject is chosen for the speaker, it may be the fault of the one who chose that subject rather than the speaker himself.

In our neighboring State of Kansas, who has sponsored this circuit-type program for a longer period than we in Missouri have done, many of these difficulties have been ironed out and are continuing to be ironed out because of checking each speaker and each presentation repeatedly for factors or elements which may be unsatisfactory or impractical to the hearer.

In conclusion, this program is in its infancy in Missouri and has as its ultimate goal the improvement of the general practitioner which means increasing the practical knowledge which he is to use every day. As this goal is attained, more and more men will feel that their time away from their office is justifiable and classes will be resultingly larger. The growth of the Academy program then will fulfill the dreams of the originators of the American Academy of General Practice.

Crossroads Comment

PETER V. SIEGEL, M.D.

Howdy Auntie:

Suppose most folks sometime or other wish old Alex hadnt invented the telephone. Today was one of those days when I just couldnt get anything else done except answer. Always something different though, thats what makes it interesting. Case you sometimes dont answer you always end up wondering who it was and if you were missing something. I have read and heard about all manner of ways of handeling the telephone problem but none of them work out excepting answering yourself.

It would appear that frequently we might all brush up on our telephone manners. There is such a thing and it requires a little more effort than when you are meetin somebody face to face. Bet it never occurrs to some folks that they are very discurteous over the phone.

A ferinstance. Today was quite an occasion in my book. I had a patient referred to me by a specialist in the city. That happens about as often as hell freezes over and they dont get many cold snaps down there. The referral came via the phone. His secretary placed the call. She acted like I didn't have anything else to do but sit by the phone and wait for it to ring so I should have been there but I wasnt. Reckon about that time I was way up on Haw Creek making a call. Anyhow by the time I got to the hospital the operator had been calling every three minutes. After we made connections the secretary said wait a minute, Doctor wants to talk to you. It could have been most any of seven hundred and eighty five so all I had to do was wait and see. Six minutes later she came back to see if I was still waiting and to reassure me I would only have to wait a minute more.

Right then is when it happened. At any rate when I place a call I make durn sure the party Ime calling doesnt have to wait on me. I just might be asking a favor of him. I dont think its at all unreasonable to expect that little courtesy when someone calls me. Then too its mighty nice to know who you are talking to. That little proplem will be solved when we have teleTV or something.

But wouldnt it be an awful state of affairs if Alex hadent invented the telephone. Incidentally we still have some of his first models in use out here at the Crossroads.

Your nephew,
PETE

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For many years clinicians and surgeons have recognized the therapeutic value of the high protein dietary.

In more than normal amounts, protein is essential in the treatment of many diseases characterized by hypoproteinemia[1]—nephrosis,[2] sprue, pellagra, chronic colitis, certain liver afflictions,[3] anorexia of diverse etiologies. High protein intake helps to stabilize tissue protein in diseases in which protein catabolism is increased, such as hyperthyroidism and protracted high fever. Dietaries high in protein promote wound healing in the surgical patient and speed convalescence.[4] Sufficient protein ingestion constitutes a protective measure in the geriatric patient.[5] Large amounts of protein are required to satisfy the growth and other metabolic needs of the pediatric patient.

Meat provides large quantities of protein highly effective in the body economy—tissue growth and maintenance, formation of antibodies, enzymes, and protein hormones, and regulation of fluid balance. It also supplies valuable amounts of B vitamins and essential minerals including iron, phosphorus, and potassium. Appeal to the palate, easy digestibility, and its nutrient contribution make meat an important component of therapeutic diets.

---

1. Taggart, H. A.: Protein Metabolism in Relation to Nutritional Aspects of Medical Diseases, Pennsylvania M.J. *54*:339 (1951).
2. Marquardt, G. H.; Cummins, G. M., and Fisher, C. I.: Blood Protein Replenishment in Treatment of Nephritic Edema, Quart. Bull. Northwestern Univ. M. School *26*:140 (1952).
3. Kark, R. M.: Low Sodium and High Protein Diets in Laennec's Cirrhosis, M. Clin. North America *35*:73 (1951).
4. Kekwick, A.: Protein Deficiency in Surgical Patients, Ann. Roy. Coll. Surgeons England *7*:390 (1950).
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The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

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Woman's Auxiliary

Mrs. W. E. Martin, *President*

Plans are well under way for our Annual session in Kansas City March 27-29, with Hotel President as headquarters for our Woman's Auxiliary and the M.S.M.A. during the convention.

Mrs. George Turner, El Paso, Texas, A.M.A. Auxiliary president, and Mrs. Louis K. Hundley, Pine Bluff, Arkansas, S.M.A. Auxiliary president, will be our honor guests and speak at the Monday luncheon. Also past presidents of Missouri Auxiliary will be honored at that luncheon, and Jackson County has arranged an Easter Fashion Show.

Mrs. Steward Gillmore is again general chairman with Mrs. Wm. B. Allen as co-chairman (remember the grand job they did two years ago). Mrs. Wm. H. Hickerson, president of Jackson County Auxiliary has many committees working for our pleasure and entertainment. The Buffet Supper (husbands too and informal) on Sunday night with the Jackson county social hour and home talent entertainment will be a highlight. A color film, "A Life to Save," will be shown on Monday. Mrs. Jordan Kelling, Waverly, will have the Memorial program. The nominating committee composed of Mrs. Robert Bristow, St. Joseph; Mrs. Gordon Stauffacher, Sedalia; Mrs. Ralph Coffey, Kansas City; Mrs. E. J. Helbing, St. Louis County and Mrs. A. B. Jones, St. Louis, with the advice of our President-elect, Mrs. Frank B. Leitz, are at work on a slate of officers for 1955-56, to present during our sessions.

Tuesday's luncheon will honor our Advisors, the officers of M.S.M.A. and Jackson County with their wives. Mrs. Jessie Cartwright, a forceful speaker at our National Conference in Chicago, will be the guest speaker. Mrs. Frank B. Leitz, Kansas City, will be installed as President at the close of this luncheon and preside at the Post-Convention Board meeting.

Tuesday night M.S.M.A. annual dinner is always a gala affair and well attended. Dr. Elmer Hess, President-elect of the A.M.A., will be the speaker.

We hope to welcome the officers and members of our three newly organized auxiliaries at our session. They are Marion-Ralls-Shelby with Mrs. Daniel B. Landau, Hannibal, as president; Butler-Wayne-Ripley with Mrs. Robert Englehardt, Poplar Bluff, as president; and S.E.M.O. with Mrs. Audra Smith, Sikeston, as president. One of the distinct pleasures of the Annual Meeting is to meet old and make new Auxiliary friends. Any doctor's wife in Missouri is cordially invited to attend the Woman's Auxiliary Annual Convention, March 27-29.

Pettis County Pot Pourri

C. Gordon Stauffacher, M.D.

One of my patients was in the hospital delivery room having severe labor pains without much progress. It was her first experience and I tried to reassure her and told her among other things to keep a stiff upper lip.

She replied, "But, doctor, I don't hurt there."

If a man still has his appendix and his tonsils, the chances are that he is a doctor.

The young man objected to my diagnosis of gonorrhea.

"But, Doc," he protested, "where did I get it?"

"Young man," I replied, "if I could follow you around for twenty-four hours a day, I probably could tell you."

Medical glossary: Athletic supporter.

Baseball fan interested in the Kansas City A's.

The local druggist told me about a newlywed who came into his store and asked for something to make bigger and better babies so he brought out a bottle of tonic.

"Will this do the trick?" she asked.

"No complaints yet," he replied.

"I'll take a bottle," she said, "but tell me, who takes this, me or my husband?"

I have a patient who complains he always has too much month left at the end of his money.

My six year old thinks I should wash off some of my jokes.

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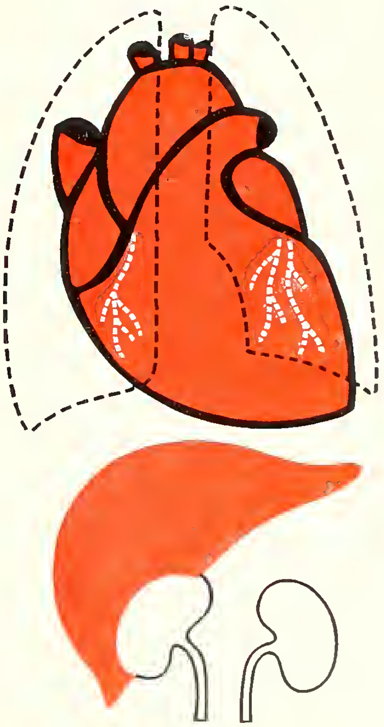

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News From the Medical Schools

WASHINGTON UNIVERSITY

A grant of $400,000 has been given to Washington University School of Medicine by the Rockefeller Foundation to endow a program of research and training in disorders of the skin, Dean Carl V. Moore announced recently. The grant was payable December 31, 1954. "The gift is in response to a long felt need for a division of dermatology in the medical school with a full-time head," according to Dean Moore. "At present no such full-time division exists in any privately endowed university. The division will be located in the Barnard Free Skin and Cancer Hospital, now a part of Washington University-Barnes Medical Center. The plan which will be carried out at Washington University will be to have the new division of dermatology as a part of the department of medicine. It will be the means of stimulating research and training of young physicians who wish to make academic careers of dermatological teaching and research."

The 31st national convention of Phi Beta Pi, national medical fraternity, was held in St. Louis December 28-30. Members of Mu Chapter of Washington University School of Medicine and Lambda Chapter of St. Louis University School of Medicine were hosts to the eighty delegates and second delegates. The program included a scientific seminar at Washington University School of Medicine and a scientific meeting and panel discussion at St. Louis University School of Medicine.

Included on the program for the seminar at Washington University were reports by Dr. W. Barry Wood, Jr., Busch professor of medicine and head of the department of internal medicine; Dr. Willard M. Allen, professor of obstetrics and gynecology and head of the department; Dr. John C. Herweg, assistant professor of pediatrics and assistant dean; Dr. Eugene M. Bricker, associate professor of clinical surgery; and Dr. Gladden V. Elliott, assistant professor of radiology. They reported on recent advances in their fields of medicine. Dr. David E. Smith, associate professor of pathology, acted as moderator.

Dr. C. Rollins Hanlon, professor of surgery and director of the department at St. Louis University School of Medicine, discussed "Heart Surgery Today and Its Various Aspects" at the scientific meeting at St. Louis University. A panel discussion followed.

Dean Carl V. Moore, of Washington University School of Medicine, was guest speaker for the Phi Beta Pi banquet held December 29. His subject was "Recent Developments in the Field of Medicine."

Dr. James L. O'Leary, professor of neurology at Washington University School of Medicine, was named president-elect of the American League Against Epilepsy at the national meeting of the association held recently at the Ambassador Hotel in New York. Dr. O'Leary will take office in December, 1955, for one-year term. A graduate of the University of Chicago School of Medicine, Dr. O'Leary has been associated with Washington University since 1928.

The Washington University Medical Society held its third meeting of the school year January 26. Three research papers were presented. They were prepared by Dr. William Sleator, Jr., assistant professor of biophysics in the department of physiology, and Dr. Harvey R. Butcher, Jr., instructor in surgery; Dr. James Barrett Brown, professor of clinical surgery, and Dr. Minot P. Fryer, assistant professor of clinical surgery; and Dr. Henry A. McQuade, research assistant in radiology, Dr. Morris E. Friedkin, assistant professor of pharmacology, and Alice A. Atchison, technician in the department of pharmacology.

Dr. Robert E. Gross, William E. Ladd professor of children's surgery at Harvard Medical School and chief of surgical service at The Children's Hospital, Boston, delivered the sixth annual Major G. Seelig Lecture at Washington University School of Medicine January 19. He reported on "Problems in Cardiovascular Surgery." The Seelig lectureship was established in 1948 in honor of Dr. Major G. Seelig, then professor emeritus of clinical surgery at Washington University School of Medicine, with funds contributed by friends of Dr. and Mrs. Seelig. Deeply interested in pathology and in cancer, from 1931 to 1940 Dr. Seelig was director of research at Barnard Free Skin and Cancer Hospital. In 1940 he assumed charge of pathology at that hospital, a position he held until 1947, when he moved to California, where he died in 1953. In addition to his contributions of knowledge concerning cancer in human beings, Dr. Seelig also was known for other research, such as the discovery that adhesions between intestines after intra-abdominal operations could, in many instances, be traced directly to the talcum powder used on the surgeon's gloves. For many years chief surgeon at Jewish Hospital, Dr. Seelig was chiefly responsible for the founding of the People's Hospital.

Dean Carl V. Moore, of Washington University School of Medicine, is one of 10 winners of the 1955 Modern Medicine Award for Distinguished Achievement, it was announced recently. The award, made by *Modern Medicine,* a nationally-circulated medical magazine, was given to Dr. Moore for his contributions to the field of hematology and for leadership in medical education.

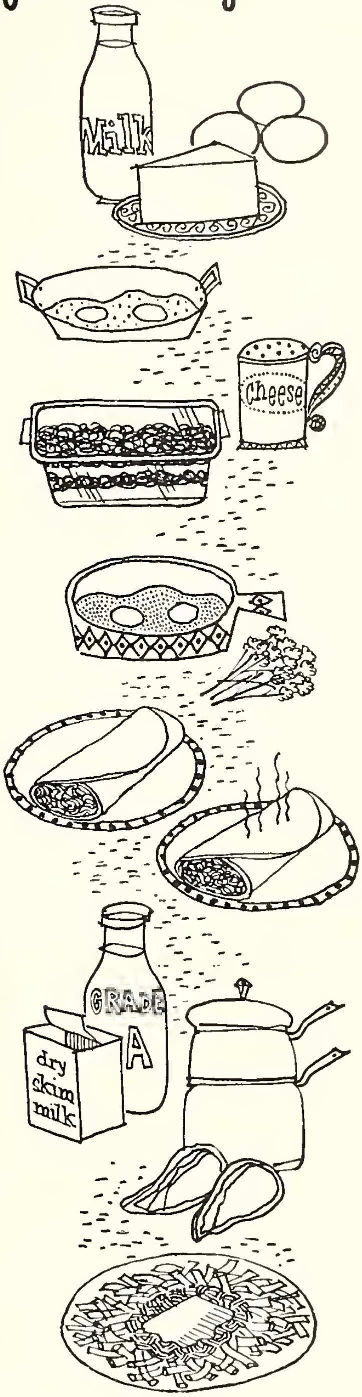
Dr. William B. Kountz, assistant professor of clinical medicine at Washington University recently was elected president of the Gerontological Society at a meeting at Gainesville, Fla. He will take office next year.

Grants totalling almost $40,000 have been awarded to Washington University by the National Foundation for Infantile Paralysis, it was announced December 27 jointly by Chancellor Ethan A. H. Shepley and Basil O'Connor, president of the National Foundation. All grants are effective January 1. Research by Dr. Eli Robins, Dr. Carl F. Cori, Dr. Robert K. Crane, and Dr. James L. O'Leary, all of the School of Medicine, will be financed by the funds.

UNIVERSITY OF MISSOURI

Postgraduate Activities. Dr. Clarence D. Davis, Professor of Obstetrics and Gynecology, and Dr. William B. See, Assistant Professor of Obstetrics and Gynecology, attended the International Congress of Obstetrics and Gynecology in Chicago, Illinois, December 13-17, 1954. Dr. W. R. Hepner, Jr., Associate Professor of Pediatrics, and Dr. J. C. Cope, Clinical Associate in Urology, presented lectures in the third of a series of postgraduate lectures on the campus of the University of Missouri School of Medicine on

Planning the Low-Purine Diet for a long run...



Imagination is essential to this diet since your patient may have to follow it for many years. These diet "do's" can show him how to use eggs, cheese, and milk—a trio of almost purine-free foods—to supply the major portion of his protein.

In these, the trio plays a solo—

Eggs baked in pimiento-flecked cheese sauce are hard to resist. Or, if your patient prefers, the sauce can be poured over hard-cooked eggs.

A casserole of eggplant and tomatoes layered alternately with ricotta or cottage cheese makes a satisfying entree. Add a sprinkle of grated parmesan with a fine Italian hand.

Your patient may like his eggs poached in tomato juice. Then serve them in a soup bowl with a frill of chopped parsley on top.

In these, the trio plays accompaniment—

Ham 'n' egg rolls come hot or cold. For hot, roll a warm slice of ham around eggs that have been scrambled with a pinch of savory. For cold, roll ham around egg salad mixed with cottage cheese.

Oyster stew can be creamy without cream when the milk is bolstered with dry skim milk powder. A pinch of thyme and some chopped parsley add savor.

Broiled salmon or tuna-burgers nestle nicely in a nest of noodles. A slice of cheese on top adds color and broils to a bubbling brown.

These suggestions are only a few of the possible combinations of this versatile trio. And the adequate protein nutrition they make possible, plus a liberal intake of fluids, may help establish a regimen that will please you both.

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December 16, 1954. Dr. Roscoe L. Pullen, Dean, talked on "Postgraduate Medical Education" to the Butler County physicians and the staff of the Veterans Administration Hospital at Poplar Bluff, Missouri, on December 21, 1954. Dean Pullen spoke on "The Progress of the University of Missouri School of Medicine" on "Showcase," a TV program produced by the University of Missouri Adult Education and Extension Service. This program was presented on KOMU-TV on January 2, 1955. Dr. William A. Sodeman, Professor in the Department of Medicine, and a member of the Board of Directors of the Missouri Heart Association, attended a meeting of that Association in Kansas City on January 9, 1955. Sodeman also addressed the Grand River Medical Society and the Missouri Academy of General Practice in Chillicothe, Missouri, January 13, 1955.

Publications. Dr. Roscoe L. Pullen, Dean of the University of Missouri School of Medicine, is the editor of a 669 page book on "Pulmonary Diseases" written by twenty leaders in the field, which was published early in January by Lea and Febiger of Philadelphia. It is the first new book on the subject since newer antibiotics were introduced into the medical field. Dr. William A. Sodeman, Professor of Medicine, is a contributor to one section of the book.

Honors. Dr. Milton D. Overholser, Professor of Anatomy, was presented a citation for distinguished service in the medical field by the National Council of Phi Beta Pi Medical Fraternity at a banquet at the Park Plaza Hotel, St. Louis, on December 29, 1954. Overholser attended the two-day convention held at the Park Plaza Hotel December 28-29.

School of Nursing. On January 16, 1955, the School of Nursing had Capping Exercises for sixteen student nurses. Dr. Roscoe L. Pullen, Dean, gave a short talk on "Nursing in Modern Society."

Gifts. When the University of Missouri School of Medicine opens its new eight story Teaching Hospital it will have two beautiful flags to stand in the lobby of the building, and a third one to fly from an outdoor staff, all of them the gift of a Kansas City manufacturer, Mr. Nat Hechtman, President of the Capitol Flag and Banner Company of that city. Mr. Hechtman proposes a gift of an American flag and the Missouri State flag to stand in the lobby of the new Teaching Hospital, and another American flag to fly from an outdoor staff to be erected in an entrance island in front of the building. Mr. and Mrs. Hechtman made the offer in appreciation of the progress being made in the development of the new four-year School of Medicine at the University of Missouri.

Assistant Dean Appointed. Thomas H. Alphin, M.D., Bethesda, Md., assistant director of the Washington Office of the American Medical Association and Consultant in Chemical Warfare to the Federal Civil Defense Administration, has been appointed associate professor of anatomy and Assistant Dean of the School of Medicine of the University of Missouri. He is to assume his new duties about March 1. Dr. Alphin is a native of Branchville, Md., and received his early education in Virginia, graduating from Augusta Military Academy in Fort Defiance, Va., in 1931. He received a Bachelor of Science degree (cum laude) from Washington and Lee University in 1936, a Master of Science degree from the University of Virginia Graduate School in 1936, and his M.D. degree in 1947, also at the University of Virginia. He has served as an assistant professor of biology at Washington and Lee, instructor in anatomy at the University of Virginia, and as Staff College Lecturer on medical problems of civil defense at the Administration's Staff College in Olney, Md. He was appointed assistant director for the A.M.A. Washington office and Consultant in Chemical Warfare to the Civil Defense in 1953.

SAINT LOUIS UNIVERSITY

A gift of $142,500 to the Saint Louis University School of Medicine to establish a Chair in Pathology by William McBride Love in memory of his mother,

(Continued on page 248)

Capsule Clinics

IRVING A. WIEN, M.D.

- There is something always not quite normal about cancer cells. The difference is extremely difficult to describe, but with experience the microscopist can detect cancer cells in masses among normal cells and with much experience can recognize them even as isolated units in many cases. Reimann, S. P.: Advances in Medicine and Surgery, Graduate School of Medicine, University of Penn., W. B. Saunders Co., 1952.

- Cystic hygroma of the neck is an uncommon lateral cervical tumor usually seen in infants and young children. It is believed to arise from sequestrations of the lymphatic tissue derived from the primitive jugular sacs which failed to join the lymphatic system in the normal manner. Sedgwick, C. E.: Surg. Clin. North America 33 (June) 1953.

- Of the three antibiotics penicillin, aureomycin, and terramycin, penicillin was the most effective in eradicating streptococci from the throat. It also produced less undesirable side effects. Denny, F. W., *et al.*: Pediat. **11** (January) 1953.

- A study of 21 male and 24 female breast-fed infants from birth to 6 to 7 months of age revealed that the pattern of growth does not differ significantly from that of artificial fed infants of the same socio-economic group. Paiva, S. L.: Pediat. **11** (January) 1953.

- The observations, now impressive in number, that corticotropin (ACTH) and cortisone may precipitate schizophrenic and manic-depressive episodes in patients without previous psychosis should be followed through. Here indeed is a hot scent. Cobb, S.: Arch. Int. Med. **92** (August) 1953.

ELECTRON PHOTOMICROGRAPH

Streptococcus pyogenes 36,000 X

Streptococcus pyogenes is a Gram-positive organism commonly involved in a great variety of pathologic conditions, including

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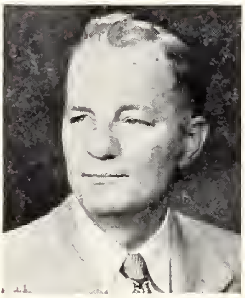
President's Page

The 97th Annual Session of the Association, now less than a month away, offers physicians in Missouri one of the best opportunities for postgraduate work that seldom is so easily available. Postgraduate education is becoming constantly more necessary to the practicing physician and surgeon and the time for obtaining it is becoming increasingly less. Concentrated into a three day program, the Annual Session offers much.



The program appears in full in this issue with brief statements of the color television presentations. Television is rapidly becoming one of the most efficient mediums for continued study and following is a little more detail of this portion of the program.

Monday, March 28. Orthopedics and Neurosurgery: Traffic Trauma and Fractures (demonstration of salient features and mechanics of various types of fractures); X-Ray Diagnosis; Methods of Reduction and Fixation; Cast Hazards; Plaster Technics.

Diagnosis of Peripheral Nerve Injuries: Ulnar, Median, Radial.

Nerve Blocks: Indications and Technics: Stellate; Lumbar; Splanchnic.

Plastic Surgery: The Immediate Care of Wounds of Face, Head and Hands Which Will Improve End Results; Technic of Biopsy of Various Skin Lesions to Secure Best Specimen and Cosmetic Results; Revision of Scars of Hands and Face; Skin Graft Technics.

Tuesday, March 29. Proctology: Demonstration of Anatomy of Anorectal Region; Operative Clinic; Hemorrhoids; Fissure.

Diagnosis of Intestinal Obstruction in: High Small Bowel; Low Small Bowel; Ileus; Large Bowel.

Rheumatology Clinic: Differential Diagnosis with Patient Demonstration; Physical Therapy for the Patient at Home; Joint Injection Technics.

Clinicopathologic Conference: Case Presentation for Teaching Purposes.

Wednesday, March 30. Operative Clinic: Pulmonary Lobectomy.

Medical Management of Tuberculosis: Newer Methods and Drugs.

Exfoliative Cytology in Diagnosis: Cervical Lesions; Pulmonary Lesions; Gastric Lesions.

It is hoped that no member of the Association will miss this television presentation or the formal presentations of the Session.

H E Petersen M.D.

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 52 March, 1955 Number 3

Cod Liver Oil in Proctologic Practice

MARK M. MARKS, M.D., *Kansas City*

Medication for wound healing must be evaluated in relation to the physiologic state of the individual treated. Nitrogen balance, systemic disease, caloric and vitamin intake, hydration, infection, bacterial and chemical toxins, foreign bodies as well as other factors play an important role in the healing process. When all physiologic functions are in balance, tissue repair continues at a maximum rate until completion. It remains for the physician to support the physiology and create, by proven methods, the best opportunity for unobstructed healing.

Trial and observation remain the best ways of determining therapeutic value of medication. One substance that has endured this test of time has been cod liver oil. Although its mode of local action is not fully understood, its long usage and continued wide acceptance warrants further study. Many observers have reported its unique properties in wound healing. Danne *et al.*[1] state that there are primarily two fractions in the crude fish oil that are separable by distillation and that both of these have the ability to cause collogen regeneration. Lauber[2] and Lundh[3] concluded that both vitamins A and D of cod liver oil are locally absorbed and act by irritation to stimulate wound repair. Hardin[4] and others[5, 6, 7, 8] believe that there is bacteriostatic action in the oil and that the vitamins are essential in the metabolism of regenerating tissue, particularly in the skin where synthesis of these vitamins takes place under the influence of sunlight. Callahan[9] used cod liver oil in treating wounds and burns and also claims that this medication is sterile and bacteriostatic. Clayton[10] used the fish oil in treating 171 patients with burns of all degrees with good results. He describes the deposit of an elastic membrane by intrafascial precipitation. Aldrich,[11] in an eight year study, reported progressive healing in a variety of surgical wounds including many with deep muscle injury. The beneficial therapeutic effects of crude cod liver oil in ointment and lotion form have also been reported by Astroue,[12] Amthein,[13] Beherman[14] and many others. There is hardly a field of medicine that is not using some form of cod liver oil with satisfactory results.

Wounds of the terminal bowel and adjacent parts differ from others in rate of repair. A hyperactive intestinal tract sweeping its caustic stream over these wounds retards healing to a marked degree. Bacterial toxins, chemical and biochemical irritants, poor wound drainage with subsequent muscle spasm and edema also contribute their adverse effects upon injured areas. The inherent local resistance to infection, as in other body orifices, permits limited protection. Basic surgical principles in the treatment of anorectal disease have been well outlined in texts dealing with proctologic subjects. A recent dissertation relative to this subject was excellently done by Gerendasy.[15]

The substances studied were crude cod liver oil, cod liver oil ointment and cod liver oil lotion.* Mineral oil and petroleum jelly were used as comparative standards. These were first tested in large wounds such as those following operations for anal fistulae, lacerations and excision of tubercular areas. Gauze saturated with mineral oil and placed on fresh wounds produced no visible change even after twenty-four hours. Cod liver oil on gauze in contact with deep wounds or abraided skin heightened in color after two hours. There was also a marked outpouring of lymph and a transudation of leukocytes. In such wounds of a week or more duration, the bland hydrocarbon oil or petroleum jelly caused water-logging and increased bleeding of the wound. The unsaturated fish oil improved the local circulation

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From the Section on Proctology, Department of Surgery, Menorah Medical Center, Kansas City.

* Supplied through the courtesy of Desitin Company, Providence, R. I.

as evidenced by deepening of color, increased lymph flow and lysed necrotic tissue. There was no fixation of viable cells. This change could be seen two to three hours after substituting the cod liver oil for the hydrocarbon material. Eight hours after the application with the fish oil, the granulations became sturdy and lost their tendency to bleed when lightly traumatized.

These observations led to the use of cod liver oil upon wounds of the mucous membrane. Five women suffering from radiation proctitis resulting from radiation of cervical and uterine malignancy were instructed to instil two ounces of cod liver oil into the rectum on retiring. This was to be done in the kneechest position to permit long contact with the medication. After four days of this treatment there was subjective lessening of pelvic tenesmus. Weekly inspection by proctoscopy showed gradual clearing of the fragmented and necrotic mucous membrane. The involved areas became cleaner and the granulations brighter in color with less tendency to bleed. Regeneration of mucous membrane seemed related to the degree and duration of the radiation injury. Three of the five who were from six to eighteen months post-radiation responded more rapidly than the remaining two whose trauma had been so severe as to cause irreversible stricturing of the mid rectum.

Six patients under treatment for chronic non specific ulcerative colitis were instructed to use rectal instillation of cod liver oil on retiring. Six others were told to use the same quantity of mineral oil. Whether because of local absorption by the damaged mucous membrane of the saponifiable fractions of the fish oil or the systemic utilization of the vitamins, definite salutory effects were experienced by the patients using cod liver oil. After two to four days, bowel frequency subsided. Blood, mucus and tenesmus lessened. Proctoscopic examination showed reduction of mucosal edema and decreasing engorgement. The mineral oil users were not benefited.

Two children, aged 7 and 8, were suffering from caustic effects of soapsuds enemata. Daily cod liver oil instillation brought prompt relief from tenesmus. The edematous mucous membrane returned to normal within three days. Four children had eaten popcorn and had lacerated the rectal mucosa and anal integument from passing corn imbedded dry stools. These also responded well to cod liver oil rectal instillations.

Cod liver oil in combination with other medicaments has also found many useful applications. Holland[16] stressing conservatism in skin therapy points to the effectiveness of Desitin lotion in the treatment of a variety of inflammatory dermatoses. Turell[17] reported on the use of Desitin ointment which consists of Norwegian cod liver oil combined with zinc oxide and talc in a petrolatum and lanolin base. He quotes Booe who also treated poorly healing anorectal wounds with satisfactory results.

Following Turell's suggestion I began to use Desitin ointment and lotion in my practice because in these forms the therapeutic application of cod liver oil was wider than by the oily medium. My first use of the ointment was as a lubricant and dressing in the postoperative digital examination of anal wounds to break up adhesions and mechanically reduce edema. The emolient, soothing effect of the medication used in this manner was well tolerated in more than six hundred patients. Since I do not employ mechanical dilators, it has been my practice to insert a rounded glass rod or the small finger well lubricated with Desitin ointment into the anus on the seventh postoperative day. The index finger is used biweekly in the same manner henceforth until complete healing has occurred or until the patient is symptom free.

Substituting petroleum jelly for the cod liver oil ointment in many instances proved again the superiority of the anabolic effect of the cod liver oil compound. This was demonstrated in two cases of tubercular patients with extensive wounds following operations for anal fistulae. The comparative rapidity of epithelization and granulation was also seen in the rate of healing of proctotomy wounds and those that resulted from cryptectomy, fissurectomy and fistulectomy.

Twenty-two patients treated for pilonidal disease and four with pyogenic granuloma in scars from previous surgery for pilonidal cysts and sinuses were seen during this two year period. In all cases whether acute, chronic or recurrent, the major tract and all lateral branches were treated by incision and suturing of the skin margins to the inner ectodermal membrane or scar. No viable tissue was removed. At the time of operation, a chemical debridement with Carnoy's solution cleansed the cavity. This cleansing permits early contraction of the sinus tract. There is no postoperative pain. Complete healing with mobile scars takes place from ten to twenty-one days in the average case. Hospitalization is rarely longer than twenty-four hours. The after care consists of daily showers, complete unrestricted activity or diet and daily applications of Desitin ointment to the wound.

A comparison of tensile strength of these wounds was made by alternating petroleum jelly and Desitin ointment at four day intervals. Again, the water-logging action of the hydrocarbon ointment was seen. Granulations became pale, soft and bled easily on the least trauma. Within four hours after substituting the cod liver oil ointment, the wound color heightened and the tendency to bleed stopped. The remaining epithelium of the sinus tract and the cut edges of the skin united rapidly with minimal soft scarring. In particularly slowly healing wounds such as may occur, an equal mixture of 5 per cent scarlet red ointment and Desitin ointment will increase the rate of growth of blood vessel formation and strengthen the wounds.

The symptom complex of pruritus ani remains a concern to doctor and patient alike. The greater number, I believe, fall into the category that may be called "fastidious pruritics" because, in their over zealous attempt at cleanliness, they abrade their anal integument to a degree to require medical attention. Secondary infection by cocci and fungi and also the chemical irritation of stool further add to the burden of the constantly traumatized skin. Explanation to the patient of the mechanism of the self abuse should be done first. Soap of any sort should not be used in or about the pruritic area. Disposable facial tissue and water alone will adequately cleanse the parts. Although ointments generally increase maceration by retaining moisture, Desitin ointment or lotion will not. Rather, these products have been used to aid in the regeneration of the lacerated skin. During this two year period of observation no sensitivity to this medication was encountered. In the majority of cases of uncomplicated pruritus ani relief was prompt and continued. Some, because of concomitant disease, required more intensive study to determine and correct the causes of the itching skin.

Desitin lotion and ointment containing cod liver oil were also used with satisfactory results for patients with perianal psoriasis as well as in cases of eczematous dermatosis. Good results were obtained in elderly patients suffering from anal and vulvar itching caused by highly alkaline urine or acrid vaginal secretions. Contact dermatoses likewise were treated with rapid reduction of inflammation, crusts and tissue debris quickly softened and separated and healing progressed uninterrupted.

DISCUSSION

Cod liver oil or compounds containing it have been used to promote wound healing as an empirical medication long before investigation as to its action was made. This study reaffirms the work of others who have found cod liver oil medication useful as a topical treatment of wounds of many types. In treating injuries of the anorectum the salutory effects of the medicaments gave the same therapeutic response in spite of the presence of viable bacteria and other irritants. Wounds of the mucous membrane reacted equally well. Deep wounds in the area involving muscle injury responded likewise.

Increased transudation of leukocytes and fluid following application of cod liver oil medication indicates the presence of irritants that enlarge the vascular bed. For the same cause, excess fluid is released and there is lysis of necrotic tissue as well as decongestion. Because of this improved local circulation and oxygenation the rate of growth of connective tissue and epithelium is not retarded. Absorption of both vitamins A and D is known to take place in abraded areas. The saturated and the unsaturated fatty acids in the oil also play an unknown part in maintaining the reparative process. The physiologic effect of cod liver oil appears to be primarily to promote maximum anabolic action.

CONCLUSIONS

Cod liver oil, Desitin ointment and lotion have been used in proctologic diseases for the last two years with positive evidence of benefit in repair of a large variety of non-clean wounds.

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Should the Paraplegic Be Braced?

OTAKAR MACHEK, M.D., AND HARDIN A. COLLINS, M.A., *St. Louis*

WHILE THE average life expectancy of the paraplegic was just a few months at the time of World War I, World War II brought about a change in the prognosis of the paraplegic patient. Except for the advent of antibiotics, this was primarily due to a change in doctors' attitudes. Neglect and indifference were replaced by coordinated rehabilitation programs, and the neurosurgeon, urologist, orthopedic and plastic surgeons began to cooperate closely with rehabilitation teams.

Within the last two years we have seen twenty-three paraplegics who had been treated elsewhere in large rehabilitation centers; six of them from two to four years, and seventeen from one to two years. All these patients were referred for further rehabilitation. This fact makes one question whether the objectives and planning for these patients had been realistic.

The ultimate aim of a rehabilitation program is to have the patient attain as normal an existence as possible, in the shortest period of time. The program should start as soon as possible after the onset of the disability. The goals include physical, social and economic restoration. The time factor is most important not only the interval between the onset of the disability and the beginning of rehabilitation procedures, which incidentally influences the prognosis, but also the rate of progress and the duration of the training. Certainly, once the disability is static and the patient can be maintained on a full time coordinated program, it should be possible to reach the objectives of rehabilitation in less than one year. We have seen patients who, because of urologic and skin complications, have had their rehabilitation program constantly interrupted and their hospital stay prolonged. It becomes more difficult in these cases to achieve adequate objectives and to keep the patients well motivated. Frequently the psychologic aspects of the disability were more difficult to overcome than the physical problems.

A study has been made of eighty-three paraplegics who underwent rehabilitation during the last three years: fifty-two in the Jewish Hospital of St. Louis and St. Mary's Hospital Group, and thirty-one in other rehabilitation centers on the east and west coasts. It was found that only twenty-four patients (29 per cent) are wearing their braces, and that fifty-nine patients (71 per cent) are leading purely wheelchair existences. Out of the fifty-nine patients, seventeen are standing in their braces one or more hours per day, so that forty-two patients (50 per cent) are not using their braces at all. The average length of hospital stay in the St. Louis series was five months; however 16 per cent had an average length of stay of fourteen months because of complications mentioned. Therefore, 84 per cent of the St. Louis series had an average length of stay of three months only.

The reasons why patients do not use their braces were investigated and it was found that patients consider the use of braces impractical since they have to use their wheelchairs anyway except for short distances. Although it was explained to the patients why they ought to spend at least one hour a day bearing weight on their long bones, 50 per cent did not even use braces for that purpose.

A brief review of the literature revealed that extensive studies have been made on the effects of bedrest. Protein and calcium losses due to infectious diseases[1] were described, as well as fractures and surgical procedures,[2] metabolic disturbances[3] and burns.[4] A classical study on "The Influence of Prolonged Muscular Rest on Metabolism" was done by Cuthbertson[5] who pointed out that nitrogen loss, wasting of muscles, as well as hypercalcinuria, followed prolonged rest. Other studies and symposia substantiated his belief.[6] Great impetus was given to these investigators by a series of conferences on the metabolic aspects of convalescence. Keys[7] studied twelve normal subjects, conscientious objectors, who were put on bedrest from three to four weeks, and noticed a negative nitrogen and calcium balance. Rest was better defined by Dietrich[8] who described marked increase in excretion of nitrogen, calcium and phosphorus in four healthy subjects who were placed in casts from the umbilicus down for six weeks. Impaired creatine metabolism with decrease in muscle mass and an increased tendency to fainting when placed in the erect position were noted. A decline in blood volume and an increase in resting pulse were likewise noted. The nitrogen loss occurred from five to six days after immobilization and ceased after one month of immobilization. The calcium excretion remained increased for more than one month, or until ambulation was started.

Albright[3] thought that these changes were due to lack of stress and strain on the long bones, which normally stimulates the osteoblasts. Thomp-

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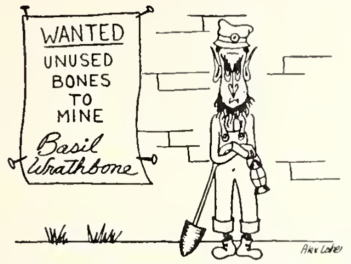
From Physical Medicine Rehabilitation Service, Firmin Desloge Hospital.
(O. M.) Instructor in Orthopedics, St. Louis University School of Medicine.
(H. A. C.) Rehabilitation Counselor, United Mine Workers of America.


WANTED
UNUSED
BONES
TO
MINE
Basil
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Alex Usher

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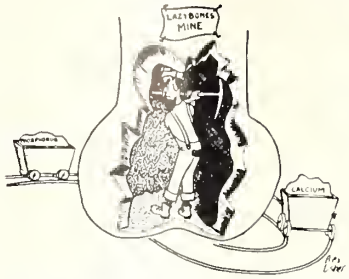
LAZYBONES
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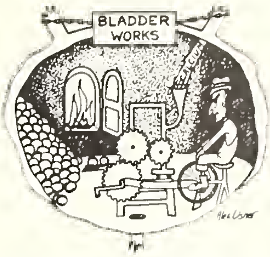
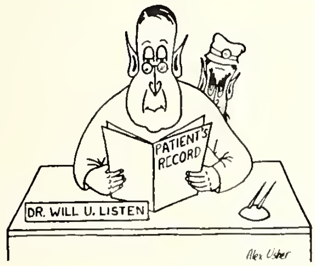
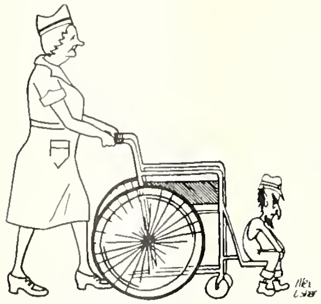
BASIL WRATHBONE SPECIALIZES IN A SPECIAL TYPE OF MINING, CALLED UNDERMINING, WHICH USES NO SHORES THE MINERALS HE MINES ARE USED FOR PRODUCING BLADDER STONES AND SKIN SORES.


BLADDER
WORKS
CALCIUM
Alex Usher

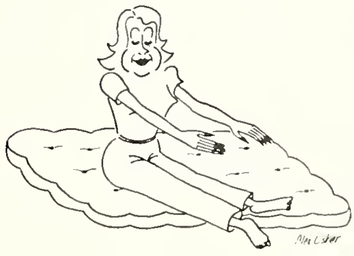
HIS FACTORY IS WELL EQUIPPED TO PRODUCE THE FINEST AND HARDEST BLADDER STONES, BUT UNFORTUNATELY HE FORGOT TO ARRANGE SHIPPING FACILITIES.


PATIENT'S
RECORD
DR. WILL U. LISTEN
Alex Usher

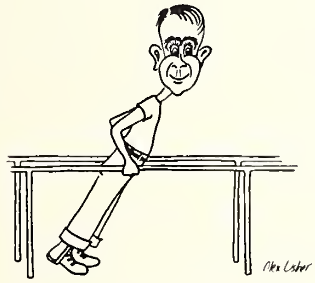
HE PROSPECTS IN THE DOCTOR'S RECORDS AND TAKES NOTE OF ALL THOSE PATIENTS WHO HAVE HAD EXCERCISE PRESCRIBED.



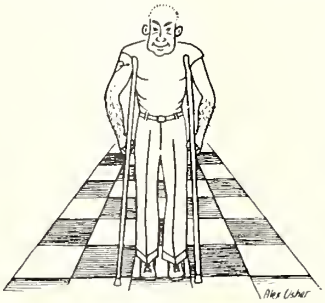
THEN HE MAKES THE ROUNDS TO SEE IF THE DOCTOR'S INSTRUCTIONS ARE BEING FOLLOWED.



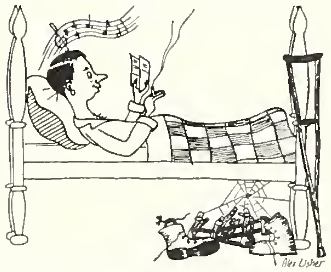
HE DOESN'T LIKE TO SEE THIS . . . . . .



THIS MAKES HIM MAD. . . . .

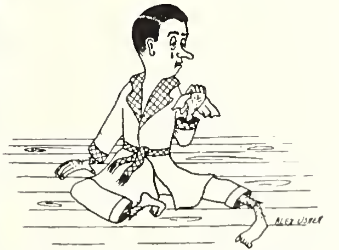


AND THIS MAKES HIM FURIOUS. . . . .



BUT HERE IS A SCENE THAT FILLS HIM WITH JOY. THIS IS I. M. LAZY, WHO RETIRED SEVERAL MONTHS AGO, AND WILL CONTRACT BASIL WRATHBONE FOR AN UNDER-THE-COVER JOB.

And so Basil Wrathbone strikes again!!!!



HERE IS PICTURED I M LAZY'S DOWNFALL THE DAY HE GOT OUT OF BED. HE WAS A BROKEN MAN AND THE ROLE HE WAS PLASTER-CAST IN FOR THE NEXT SEVERAL MONTHS MADE HIM SWEAR HE'D NEVER BE A LAZYBONES AGAIN.

son[9] immobilized the hind limbs of rabbits and noticed that there was greater atrophy in the nonweight bearing group than in the weight bearing group. Dietrich,[10] in a subsequent study, noticed that there was a 50 per cent reduction in nitrogen loss when the oscillating bed was used, and that hypercalcemia with renal insufficiency is a frequent complication in paraplegic patients. That ambulation has a definite effect on reducing hypercalcinuria was demonstrated by Howard[2] and agreed to by others. Freeman[11] found that urinary calcium rose in the paraplegic to levels of more than 500 mlgs. a day during the first week of injury. This is a more rapid rise than that which occurs following fractures[3] or immobilization,[8] but its extent is the same. Freeman[11] also believed that the reason for this was absence of stress and strain on the long bones, since decreased formation of organic matrix with normal rate of absorption would lead to demineralization and hypercalcinuria. Gillespie[12] showed that the bone changes are quantitative rather than qualitative. Early ambulation is an accepted means to prevent osteoporosis, soft tissue calcification and formation of renal calculi.[13, 14] In various series only 10 to 15 per cent[13] of patients were using braces. The figures of the St. Louis series are only slightly better, and since they are based on reply cards from patients they do not represent an objective figure.

In spite of careful explanation only 29 per cent of patients were using braces. Since we noticed that most of our paraplegic patients like to read comic strips, it occurred to us that that this would be a good way to impress the paraplegic with the importance of at least some weight bearing, even if he leads purely a wheelchair existence. The series of cartoons illustrates material which might create interest in the patients and stimulate them to carry on.

SUMMARY AND CONCLUSION

A three year study of eighty-three paraplegic patients was made. It was found that there is need for more realistic planning of the rehabilitation program. Such a program can be carried out in a small rehabilitation center satisfactorily. The need for bracing was discussed and literature reviewed. A series of cartoons was suggested to be used for patients' education.

The interpretation to the patient was made possible only through the contributions of the artist, Mrs. J. Richardson Usher, who created the cartoons.

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Plastic Planing of Acne Scars

Other Skin Defects

A. J. REICHES, M.D., AND IRWIN H. ESKELES, M.D., *St. Louis*

THIS REPORT OF the use of corrective surgical planing[1] of the skin for the treatment of acne scars and other skin defects is presented because it is felt that it is the simplest and at the present time among the most effective methods of treatment for certain types of scars. The Kurtin process has distinct advantages over the sandpaper abrasion of the skin since no hospitalization is required and one can, also, better control the amount of abrasion with this planing procedure. Silica granulomas, of course, are not a hazard in this type of therapy.

This method has been worked out over a period of five years and has now become an effective dermatologic operation for the correction and diminution of pitted scars, whether due to acne, chicken pox or small pox. It can be used to treat keratoses, both senile and seborrheic, and to improve wrinkles. Keloids can be planed down, too, but in that case roentgen therapy of some type must also be used. It is also quite satisfactory in correcting elevated, depressed and linear scars which are so often seen from automobile and industrial accidents. In some kinds of burn scars, it can be of aid.

The Kurtin Plastic Planer is a fine stainless steel brush, 1.9 cm. in diameter and 0.238 cm. thick. Each strand of steel wire is slightly curved in the direction of rotation. The brush is attached through a flexible handpiece. The electric motor (1/12 H.P.) rotates 12,000 times per minute. The procedure which we are using—the technic with some modification of Dr. Abner Kurtin of New York City—is a combination of first applying cold packs to the face plus the use of ethyl chloride anesthesia, which is then followed by the planing of the scarred areas. Subsequent to this either spectrocin or erythromycin is applied for from two to three days locally and, after that, a colored powder lotion is used. Patients are tested previously to the planing for sensitization to these medications.

Our experience has been that it takes, on the average, from seven to ten days for the scabs to come off. The plastic planing can be repeated within a period of three weeks. We are attempting to remove the superficial epithelium above the hair follicle and sebaceous gland level so that there will be a marsupialization of epithelium. Depending on the patient, it takes from two to four planings to get good results. Further planing procedures in some cases are needed (fig. 1, 2).

It is important to develop the ability to handle the Kurtin high speed steel brush technic. We feel, as does Dr. Kurtin, that numerous plastic planings, probably a minimum of a hundred or more, are needed before one develops such a sense of security and dexterity.

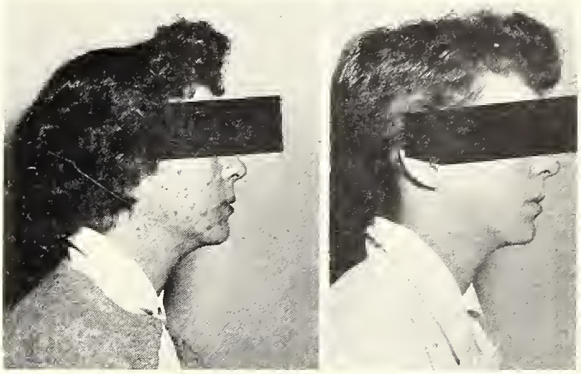

Fig. 1. A. Acne scars before planing procedure. B. Results after plastic planing.

The only complications which have been reported are an erythema of the treated parts which may take some time to disappear and an isolated report of hyperpigmentation on a darkly pigmented skin. Milia sometimes may occur, but they are easy to remove.

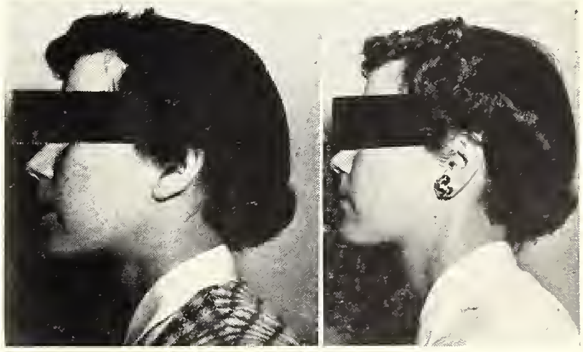

Fig. 2. Mild acne scars before planing procedure. b. Results after plastic planing.

It seems at this time that the Kurtin technic[2] is considered by a large number of dermatologists as the procedure of choice and superior to the sandpaper method and other older modifications of abrasive therapy for scars.

SUMMARY

Plastic planing is an office dermatologic treatment. Patients, even when large scar areas are treated, can return to their normal activities within a few days. In simpler cases the patient often needs only to apply a band-aid over the treated area and can return within twenty-four hours to his regular routine. This is a distinct advance, both in method and results, over most other technics for treating scars from acne and other skin defects.

4500 Olive St.

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Frog Test in Diagnosis of Pregnancy

HILLIARD COHEN, M.D.; LEONARD WALKER, Ph.D., and LIZA ZELMANOVICH, B.S., *Kansas City*

THE PURPOSE OF this paper is to report the experiences at this hospital with the male frog, Rana pipiens, in the diagnosis of pregnancy, and its value in threatened, and inevitable abortion. Tests have been done on more than 600 cases since March, 1953. This paper includes data on follow-ups of 272 cases, from March through October, 1953. Follow-ups were obtained by sending a questionnaire to each doctor for whom pregnancy tests were done to determine the final clinical diagnosis. In the cases which were operated upon, each pathology report was reviewed carefully. It is intended to point out the limitations as well as the values of this test.

Miller and Wiltberger[1] in 1948 first reported experiments which indicated that Rana pipiens might be a suitable test animal. Since that time many laboratories have reported results using this animal. Reinhart et al.[2] in 1951 ran 1,191 tests on 840 urine specimens, and reported an accuracy of 99 per cent, with three false negatives and no false positives. However, Foreman and Floyd,[3] Holyoke and Hoag,[4] and Bromberg et al.[5] and others point out that, due to a tenfold decrease in sensitivity of the frogs to chorionic gonadotropin during the summer months, the test reliability declines to about 85 per cent during this period. The mechanism of this change was studied by Biesinger and Miller[6] and was found to be due to cyclic spermatogenesis during the summer. It was suggested that Rana clamitans be substituted for Rana pipiens during this period. Suggestions for improving the test were worked out by Giltz and Miller.[7]

The use of the frog test in differentiating threatened from inevitable abortions and as an aid in the diagnosis of retained placental tissue was discussed by Silbernagel, Patterson and Pickett[8] and by Pickett, Wiltberger and Miller.[9] They presented ten cases of inevitable abortion in which the frog test, before the fetus was passed, was in every case negative. In six cases of threatened abortion in which the frog test was consistently positive, the patients did not abort.

We employ the kaolin extraction method. A minimum of 100 cc. of urine is used. If possible a first morning specimen is obtained. A few drops of brom cresyl green is added, and 20 per cent (by volume) HCl is added with stirring until the color changes to yellow (pH 4.0). Five cc. 20 per cent aqueous kaolin suspension is added, and the mixture is agitated well with a stirring rod or tongue blade. The mixture is allowed to stand for 10 to 15 minutes and the supernate is carefully decanted and discarded. The chorionic gonadotropin absorbs on the kaolin. The residue is washed into a 40 cc. round bottomed centrifuge tube and centrifuged for 15 to 20 minutes at about 3,000 rpm. The supernate is decanted and discarded. Five cc. 0.1N NaOH is added. This takes the hormone off the kaolin. The mixture is agitated thoroughly with a wooden stick. It is again centrifuged in a 15 cc. conical centrifuge tube for 15 to 20 minutes at 3,000 rpm. The supernate is carefully decanted and saved. One drop of 0.5 per cent alcoholic phenophthalein is added. Twenty per cent (by volume) HCl is slowly added, drop by drop, until the solution is barely acid. The solution is now ready for injection. It is placed in a 5 cc. syringe. A 27 gauge needle is used, and half the solution is injected into the dorsal lymph sac of each of two frogs. It is desirable to pinch the skin at the site of injection to prevent leakage out of the puncture.

Every test is run with two frogs. Unless both tests agree, the test is repeated. The frogs are placed in individual jars with a loose-fitting top, with a few cc. of saline solution. The frogs are warmed to room temperature about a half hour before injection. They are allowed to stand at least two hours after injection, and then their urine is examined for spermatozoa. With some practice one can stroke the frogs with two fingers, down their sides, and milk out urine, if it is present, into the jar. The urine and saline solution in the jar is centrifuged, and the sediment examined under high and low power for spermatozoa. The test is graded negative to four plus, four plus being hundreds of sperm cells per low power field. Three plus is indicated if there are many spermatozoa per low power field, two plus if there are only a few per field, and one plus if there are only occasional spermatozoa. Only if both frogs show three or four plus is the test reported positive, and only if both frogs show no spermatozoa is the test reported negative. Otherwise the whole test is repeated. If the two hour examination is nega-

TABLE 1

ACCURACY BY MONTHS

Month	*No. Cases*	*Per Cent Accuracy*
March	60	98
April	42	93
May	34	95
June	27	92.5
July	27	89
August	31	91
September	21	100
October	20	100

Average 95 per cent over eight months. This includes eight false positives (2.9 per cent) and six false negatives (2.1 per cent).

From the Department of Laboratories of The Menorah Medical Center, Kansas City, Missouri.

TABLE 2

RESULTS OF TEST IN FOURTEEN CASES OF ABORTED INTRAUTERINE PREGNANCIES, AND ONE TUBAL ECTOPIC PREGNANCY

Preliminary Diagnosis	*Results of Consecutive Frog Tests*				*Final Diagnosis Based on Pathological Report (Tissue Examination)*
	First Test	*Second Test*	*Third Test*	*Fourth Test*	
1. Threatened Abortion	4+	1+	Neg.		Abortion
2. Threatened Abortion	3+	1+	Neg.	3+	Abortion
3. Threatened Abortion	2-3+	Neg., 4+	4+	3-4+	Abortion. Large amount of intact placental tissue received
4. Threatened Abortion	1-2+	Neg., 1+			Abortion
5. Threatened Abortion	Neg.				Abortion
6. Threatened Abortion	Neg.	Neg.			Abortion
7. Gall Bladder Attack	1+				Ruptured tubal ectopic pregnancy
8. Threatened Abortion	3+	Neg.			Abortion
9. Threatened Abortion	Neg., 4+	Neg.	1-2+		Abortion, 4½ months pregnant
10. Threatened Abortion	4+	Neg.	1+		Abortion
11. Threatened Abortion	4+	1+	Neg.		Abortion
12. Threatened Abortion	Neg.				Abortion
13. Threatened Abortion	1+	2+			Abortion
14. Threatened Abortion	Neg.				Abortion

tive, one may examine the frog urine passed up to four hours. One may also examine the frogs' urine before injection, to rule out false positives. An alternative extraction procedure,[10] using acetone instead of kaolin, is reported to reduce the number of false negatives to less than 1 per cent.

We receive a regular monthly shipment of frogs.* Seven dozen frogs will suffice for fifty tests per month. Many workers reuse the frogs after resting ten days between tests. Our data indicate that this can be done without loss of accuracy, although we do not reuse our frogs. Frogs should be promptly unpacked on arrival, washed free of grass and debris with cool water, and placed in large plastic or porcelain trays, with about a half centimeter of normal saline in the bottom. All the frogs should be washed daily with cool water, and fresh saline should be put in the containers. They are kept in the refrigerator, but not frozen.

At times, especially in our experience during the spring, many frogs may die of "red leg" (a bacterial infection) or from other causes. It has been reported[11] that almost all deaths may be prevented by dissolving one 250 mg. capsule of Terramycin in each pan of saline solution.

Miscellaneous.—It was found that if one frog was negative and the second strongly positive, the patient was almost always pregnant. This is in agreement with the widespread observation that most of the errors are false negatives. Some authors[2] report no false positives.

A few of our experiments with injection of blood serum instead of urine concentrate indicate that the use of serum may be just as accurate as urine.

It has been shown[8, 9] that the frog test may be of considerable value in cases of uterine bleeding due to abortion. Table 2 enumerates thirteen cases of aborted intrauterine pregnancies. Cases 1, 4, 8, 10 and 11 illustrate the fact that, in patients with vaginal bleeding, if the frog test has been positive, and becomes less strongly positive or negative within a short period, abortion may be strongly suspected.

We consider as good correlation, the results in twelve of the fourteen cases listed in table 2, even though a strongly positive result was not obtained on the first test. It is likely that in the seven cases when the first test was weakly positive or negative the patient already had aborted.

These results confirm the observations of others[8] that the frog test is of value in differentiating threatened and inevitable abortion. It appears that a positive result which becomes weaker or negative is consistent with inevitable abortion. Case 3 seems to illustrate the fact that a consistently positive result may not be conclusive. It appears that as long as live placental tissue adheres to the uterine wall the test will remain positive.[9] Only if the test becomes negative and remains negative is the test consistent with inevitable abortion.

As with any other examination, the frog test should be viewed only as an adjunct to the complete clinical picture, and a decision to operate should never be based on this test alone.

Menorah Hospital

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* The frogs may be obtained from E. G. Steinhilber and Co., Oshkosh, Wisconsin.

Postgraduate ***Review***

Diabetes Mellitus

Electrolyte and Fluid Balance Disturbances

HAROLD K. ROBERTS, M.D., *St. Louis, Missouri*

DIABETES MELLITUS is frequently associated with fluid and electrolyte disturbances, as well as being complicated by cardiovascular and renal diseases.

For simplification the effects of such endocrine glands as the pituitary, adrenal cortices and thyroid have been eliminated. One must remember, however, that they play an important and interrelated role in biochemical metabolic physiology of the human body.

EFFECTS OF HYPERGLYCEMIA

The series of events precipitated by an inadequate amount of insulin in the diabetic patient are initiated by hyperglycemia and glycosuria. Before acidosis has occurred some of the symptoms of diabetes may be pronounced because the excessive thirst, polyuria, weight loss and accompanying changes in water and electrolyte equilibrium are due to hyperglycemia and concomitant glycosuria.

In 1933 Atchley and his coworkers[1] showed that the sudden withdrawal of insulin from two diabetic patients produced a marked loss of both extracellular and intracellular electrolytes and water, as well as glucose and nitrogen. The electrolyte loss included sodium, chloride, potassium, magnesium, phosphorus and calcium.

At Peters[2] has aptly stated "The waste of salt and water and the reduction of the concentration of sodium and chloride in serum are in large part a product of hyperglycemia." It has been known that the body cells are not freely permeable to glucose and, therefore, as the level of the blood sugar rises to abnormally high concentrations the effective osmotic pressure of the extracellular fluid increases.

Peters[2] defines this "increased osmotic pressure as the osmotic pressure of those components that do not cross cellular membranes, and which in turn determines the transfer of water between cells and extracellular fluid." Thus this increased osmotic pressure due to hyperglycemia initiates a series of biochemical events that effects the withdrawal of water from the cells into the extracellular space and produces a state of partial cellular dehydration. At the same time there is a relative dilution of the extracellular fluid with a reduction in the concentration of sodium and chloride ions. As Atchley demonstrated, insulin given at this time would bring about a reduction of the hyperglycemia and the associated increased effective osmotic pressure which would tend to result in a reversal of the processes mentioned. Unless there had been excessive quantities of water and electrolytes lost in the urine or vomitus, the extracellular and intracellular hydration and electrolyte concentration would be restored to normal by adequate intake of liquids and food by mouth and by sufficient insulin for adequate utilization of carbohydrate and the prevention of marked glycosuria.

If excessive quantities of water are given before any insulin effect is obtained, the result would be more diuresis with accompanying loss of electrolytes and, therefore, dehydration and salt depletion would be increased.

A less disturbing metabolic picture might be produced when an excessive quantity of glucose, without an adequate amount of insulin, is given in the presence of marked hyperglycemia early in the treatment of severe diabetic acidosis. Such a procedure would also augment the loss of salt and water in the urine.

If an attempt is made to correct the prolonged hyperglycemia by insulin, but without adequate amount of water and electrolytes, another course of events would occur. In such an example the "cells would again withdraw fluid" from the already decreased extracellular volume which, in turn, would produce more dehydration of this space. Water by mouth in the presence of vomiting would also lead to increased loss of water and salt.

From these examples one can readily see that prior to ketosis prolonged hyperglycemia with its increased effective osmotic pressure and associated diuretic effect leads to a series of "unphysiologic" events. Thus the loss of water, glucose and base, especially sodium and potassium, may lead to dehydration, salt depletion, hemoconcentration, ketosis, shock and even death.

KETOSIS

If there is inadequate utilization of carbohydrate, an excessive amount of ketones (acetoacetic acid, beta-hydroxybutyric acid and acetone) accumulate in the blood due to excessive breakdown of fat and protein. Peters[2] has concisely defined ketosis "as an adaptation to deficient carbohydrate combustion." Since these ketones are strong acids, they displace the bicarbonate from its combination with sodium. In order to reduce the excessive accumulation of these acids it is necessary for the kidneys to excrete some sodium and potassium along with the ketones in the urine. The loss of sodium by the kidneys is not prevented to any great degree by the formation of ammonia for it has been shown that any significant production of ammonia occurs late in acidosis and at such a slow rate that little protection is given to the patient.

The tendency to increased acidity, or decreased pH, of the blood by the excessive formation and accumulation of ketone bodies acts as a stimulus to the respiratory center. Although hyperventilation serves to eliminate carbon dioxide, it increases dehydration and promotes the loss of heat from the body.[2]

EXTRACELLULAR DISTURBANCES

From the various metabolic examples presented the reduction of the sodium and chloride levels in the serum can be seen to be due mainly to excetory loss. It should be mentioned that a small proportion of the sodium may be transferred into the intracellular space.

The bicarbonate deficit as demonstrated by the carbon dioxide concentration is really a measurement of the accumulation of mainly ketone acids and in a lesser degree of phosphate, sulfate and organic acids from the breakdown of proteins. It should be remembered that the sodium in combination with these acids is still a potential source of bicarbonate. Peters believes that the difference between sodium and chloride is a more useful measurement of bicarbonate than the determination of bicarbonate itself.[2] He has devised the following formula for estimating the potential bicarbonate: $(Na) - (cl) + 10) = (HCO_3)$. If the potential bicarbonate plus bicarbonate in milliequivalents is 30 or more, additional bicarbonate is rarely indicated.

Nabarro's[3] studies on patients in diabetic ketosis have shown that the "typical loss" from extracellular compartment was as follows: Water 3,000 cc., sodium 500 milliequivalents and chloride 400 milliequivalents. To replace this extracellular loss it is necessary to use care in selecting the proper repair solution. The so-called isotonic salt solution, or normal saline solution is unphysiologic for it contains approximately 150 milliequivalents of sodium and chloride per liter, and may produce an elevation of the chloride level.[4] It is theoretically possible to increase the acidosis with this preparation, but usually there is adequate renal function to prevent such a tendency. A combination of normal saline and molar lactate solution may lead to an "over-shooting" of the sodium requirement, while a solution of normal saline and 1/6 molar lactate may underestimate the water replacement.[4]

Since Nabarro[3] found that during the recovery phase of diabetic ketosis, sodium and chloride were retained in the ratio of 1.3 milliequivalents of sodium to 1.0 milliequivalents of chloride he has suggested an extracellular repair solution as shown with a similar ratio to be given rapidly early in rehydration.

NABARRO'S EXTRACELLULAR REPAIR SOLUTION
(Saline Lactate Solution)

Sodium chloride ...	5.85 gm.	Sodium	130 meq / L
Sodium lactate	3.36 gm.	Chloride	100 meq / L
Distilled water to 1 litre gm.		Lactate	30 meq / L

Butler recommends a similar, but more dilute, solution while Peters would probably question the rationale of the use of sodium lactate.

CELLULAR DISTURBANCES

During the cellular phase of dehydration and the transfer of potassium, phosphorus and magnesium to the extracellular compartment, there is retardation of the normal activity of the phosphorylation enzyme system. Associated with and as a result of the decrease in cellular metabolism there is a breakdown of organic phosphates, gylcogen, protein and even a change in the pH of the cells.

Early in acidosis the serum potassium may be normal, or slightly elevated, because of dehydration and the cellular breakdown with loss of potassium to extracellular fluid which is replaced in part by sodium and because of depressed urinary excretion due to impaired renal function.

After four to six hours of therapy with insulin, water, salt replacement, correction of shock by transfusion or norepinephrine, or both, and glucose, a proportion of the potassium in the serum returns into the cells and is used in glycogenesis. It is at this time in the treatment of acidosis that there appears a diminution in the serum potassium concentration. Hoffman[5] stresses the importance of potassium in metabolic acidosis by stating that the normal serum level of it is about 5 milliequivalents which is a small amount in comparison to a level of 115 milliequivalents per liter in cells, or a total of 4,025 milliequivalents, or 160 gm. in the intracellular compartment.

The symptoms of hypokalemia may be pronounced and should be anticipated in the therapy of acidosis. Muscular weakness, painful extremities, respiratory paralysis, atony of gastrointestinal tract and even paralytic ileus have been described. Electrocardiographic changes such as lowering of T wave, lengthening of the Q-T interval, depression of S-T segment may appear, but are usually reversed as the low serum potassium is corrected.

Nabarro estimated that the typical cellular loss would be somewhat as follows: water 3,000 cc., potassium 350 milliequivalents, phosphate 150 milliequivalents and magnesium 40 milliequivalents. Replacement solutions of these electrolytes should not be given at the onset of treatment because the serum levels of these ions are either normal, or slightly elevated. The parental administration of large quantities of potassium has been reported to produce cardiac arrhythmia and even death. It is believed by some that parental potassium should be given only when its concentration is near the critical low level.[7] It must be re-emphasized that parental potassium should be given cautiously and only when frequent serum determinations can be made. When renal function is markedly impaired, the parental route should be avoided.

A solution for cellular replacement is more complicated than the one described for extracellular repair. It should contain the cellular ions in the correct proportions, and probably small amounts of added sodium and chloride to maintain their extracellular concentrations for these are still being excreted fairly rapidly during the late recovery stages after renal function has improved. Five per cent glucose may be administered in a separate infusion, or included in a multiple electrolyte solution.

Potassium has been used in repair solutions in various ways. Hoffman[5] states that intravenous fluid should not contain more than 2 gms. of potassium chloride per liter, and prefers, as most do, the oral route when possible. The contents of 10 cc. ampoules of potassium chloride containing 20 milliequivalents may be placed into 500 cc. of 5 per cent glucose, but the solution should be administered slowly intravenously. This type of solution has the disadvantage of not replacing phosphorus or magnesium.

Butler[4] in treating children in diabetic acidosis suggests that the maintenance parental repair solution be given depending upon the square meter of body surface. His hypotonic multiple electrolyte solution contains 2 to 5 per cent glucose depending upon the degree of hyperglycemia.

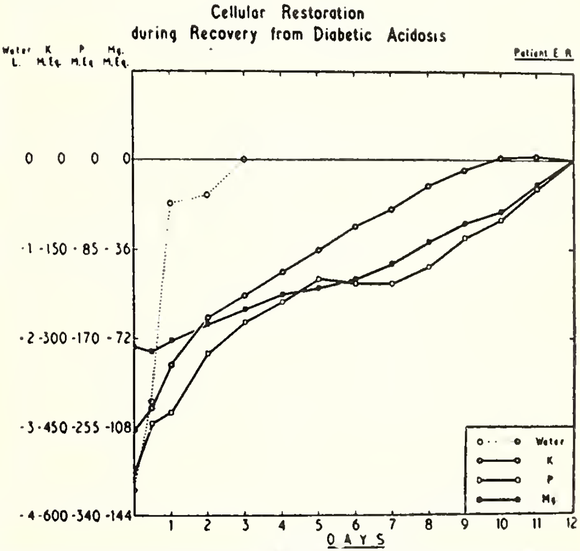
Nabarro[3] advocates giving a similar repair solution slowly after the blood sugar concentration has diminished. His cellular repair has the following formula:

Sodium chloride	1.17 gm.	Sodium	20 meq / L
Dipotassium hydrogen phosphate	0.87 gm.	Potassium	30 meq / L
Potassium chloride ..	1.49 gm.	Chloride	45 meq / L
Magnesium chloride ..	0.24 gm.	Phosphate	10 meq / L
Glucose	50.0 gm.	Magnesium	5 meq / L
Distilled water to 1 liter		Glucose	5 per cent

Ringer's lactate solution which may be combined with various glucose preparations is readily available and has been advocated by many clinicians in treatment of diabetic acidosis. This solution does not contain two of the important cellular electrolytes, namely, magnesium and phosphate, but it does have 27 mm. of lactate ion and a small concentration of calcium (4 meq.). It has greater concentrations of sodium (130 meq.) and chloride (111 meq.) than those found in Nabarro's cellular repair solution, however, the potassium concentration is low, namely, only 4 milliequivalents.

As soon as patient can tolerate liquids by mouth, it is advisable to give liquid with high potassium concentration, or one may add 2 gm. of dibasic potassium phosphate to 500 cc. of orange juice, or some flavored drink.

It is well to remember that cellular restoration occurs much slower than extracellular recovery. Nabarro[6] has shown that there are three overlapping phases in cellular repair (see fig. 1). In the first phase rehydration of the cell occurs as the blood sugar concentration approaches the normal level. In the next phase which lasts from six to ten days the potassium, magnesium and phosphorus concentrations in the cells are being restored. The third and last stage of cellular recovery starts when positive cellular nitrogen balance is obtained in about seven days, but is not completed by the end of twelve days.



Cumulative cell balances of water and electrolytes corrected for changes in cell nitrogen. Ordinate scales in proportion to normal concentrations of potassium, magnesium and labile phosphorus in cell water.

Fig. 1

It has been demonstrated recently that solutions of 2.5 per cent to 5 per cent fructose in 0.45 per cent NaCL may be useful in the first few hours of therapy in diabetic acidosis.[8]

SUMMARY

It is quite obvious that in diabetes mellitus inadequate insulin contributes to hyperglycemic diuresis which may produce early but serious changes in the fluid and electrolyte balance. If there is marked, or prolonged, impairment of carbohydrate utilization acidosis occurs which implies severe disturbance of fluids and electrolytes of the extracellular and intracellular spaces. This complicated abnormal metabolic state may be accompanied by impaired renal function and may progress to shock and even death.

Since insulin plays such an important role in the prevention and correction of these changes, it must be given early in the course of therapy and in adequate amounts. Frequently insulin alone cannot reverse all the biochemical changes that have occurred, and water and certain ions lost in the urine or vomitus must be replaced by parental administration.

Solutions containing the proper amounts of extracellular electrolytes are required and complicated replacement solutions of glucose and intracellular electrolytes are frequently necessary. Intravenous potassium for intracellular loss should be administered slowly and only when frequent serum levels can be made and the clinician is informed as to its toxicity.

Some of the repair solutions are discussed and a few are described in detail.

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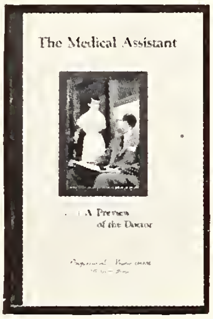

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Case Report

Anoxic Nephrosis

A Case Due to Crush Injury Successfully Treated by Conservative Management and Exchange Transfusions

W. F. MELICK, M.D.; J. J. NARYKA, M.D., AND DOMINIC V. COSTA, M.D., *St. Louis*

AS IN THE CASE of almost every new syndrome, a careful search of the medical literature reveals its previous recognition under many other names. Lower nephron nephrosis, anoxic nephrosis or acute renal insufficiency was first described as acute parenchymatous nephritis or acute tubular nephritis by Osler.[1] Later it was not included in Volhard and Fahr's classification of renal disease[2] and apparently was forgotten until redescribed by Bywaters and Dible[3] and by Moon[4] as part of the "crush syndrome." Lucke[5] in 1946 labeled the condition with the popular, but incorrect, term "lower nephron nephrosis." Anoxic nephrosis was later added as a more descriptive label because whatever the initial cause, anoxia of the renal tubular cells with their ultimate damage or destruction is thought to result in the anuria. The conditions with which anoxic nephrosis is associated have been adequately listed in the literature. The more common ones are listed in Table 1.

TABLE 1.

CONDITIONS COMMONLY ASSOCIATED WITH ANOXIC NEPHROSIS.

1. Postoperative shock.
2. Intravascular Hemolysis.
   a. Transfusion reaction.
   b. Transurethral prostatectomy.
   c. Hemolytic poisons.
3. Crush injuries.
4. Burns, Freezing and Radiation Sickness.
5. Allergic reactions, sulfanilamide intoxication.
6. Obstetrical Complications.
   a. Toxemia.
   b. Abortion.
   c. Uteroplacental damage.
7. "Hepatorenal Syndrome."

PATHOLOGY

There is general agreement as to the pathologic changes in the kidney in anoxic nephrosis. Early in the course of the disease the changes are more marked in the distal portions of the tubules consisting of degenerative changes associated with variable numbers of tubular casts and debris. Herbut,[6] however, has presented evidence that the entire tubule shares in the destructive changes. Shortly after the initial injury, edema and a cellular reaction in the interstitial tissue is noted. Regeneration of the tubular epithelium is believed to begin in three to seven days and the problem is then one of maintaining the patient in water and electrolyte balance until complete recovery occurs. It is interesting to note the known selective actions of various chemical poisons upon the tubules. Bichromate initially effects the first portion of the proximal convoluted tubule, uranium the middle portion of the proximal convoluted tubule and mercury or carbon tetrachloride the terminal portion. While the toxic effects are most marked at these points the entire tubule shows necrosis. Aside from these differences, poisoning with one of these specific agents produces clinical and pathologic changes identical with the anoxic nephrosis syndrome.

One grave disadvantage in studying the pathologic changes in the kidney and attempting to correlate them with the clinical course of the disease has been pointed out by Oliver.[7] He points out that one can think of the kidney in health, but should think of the nephrons in disease. With damage to the proximal convolution or to any part of the nephron, there may be hyperplasia and compensatory hypertrophy of other proximal convolutions. Also, when the tubular cells are damaged as in any of the common chronic renal diseases, the tubules become lined with "atypical cells" which replace the normal cells. Certain known changes are present in this atypical epithelium. For one, the mitochondrial rods, which are the site of enzyme action and absorption of protein are absent. Secondly, these cells are lacking in alkaline phosphatase and lipase. Thirdly, and most important, is the fact that many dyes which once were clearance substances, now diffuse back through the wall of the tubules and stain the cytoplasm. This diffusion back is the basis for one theory of the cause of the initial oliguria and anuria.

ETIOLOGY

While the exact etiology is not known, certain facts seem entirely logical. Shock, followed by decreased blood pressure and volume, vasoconstriction of the larger renal arteries (and perhaps changes in the cortical circulation by the intrarenal shunt proposed by Trueta[8] certainly would lead to anoxia of the renal tubular cells. In the case of intravascular hemolysis, the precipitation

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From the Departments of Urology and Surgery, St. Louis University School of Medicine.

of hemoglobin, or in crush injuries, the precipitation of myoglobin, may produce similar changes. The presence of "nephrotoxic substances" under such conditions are thought by Dobbs[9] and by Mauzt and Donnelly[10] to play an important role. Some recent experiments by Corcoran and Page,[11] and by Goodwin,[12] suggest that the combined action of all these factors may be a more important causative factor than any single one alone.

The initial anuria may be explained in two ways. The most logical one would seem to be that it is simply due to decreased glomerular filtration because of the lowered blood pressure and blood volume, together with vasoconstriction of the main renal arteries. The other would be the existence of the intrarenal shunt proposed by Trueta. A study of his experimental work seems to leave little doubt but that this can be produced under similar circumstances in rabbits.

Several groups of investigators have studied the concepts proposed by Trueta from his anatomic studies on rabbits by functional studies on man. Maxwell, Breed and Smith[13] have shown that the best evidence of a Trueta mechanism would be a simultaneous reduction in the para-aminohippuric acid clearance, inulin clearance and renal oxygen arterio-venous difference at a time when the total renal blood flow was maintained or slightly reduced. During marked renal ischemia, the only acceptable evidence for a shunt would be a reduction of the oxygen arterio-venous difference to almost zero, since under such circumstances the renal venous blood should be practically arterial. Such studies in humans have failed to show any such changes. Clark, Barker and Crosley[14] studied the problem from the arterio-venous oxygen difference in a case of anoxic nephrosis with subsequent recovery. Their conclusions were that the combination of minute extractions of creatinine, urea, mannitol, and para-aminohippuric acid, together with normal renal arterio-venous difference of oxygen and CO_2 excluded any possibility of an arterio-venous shunt as the mechanism of anuria.

The initial anuria or oliguric phase passes into a stage of continuing anuria or oliguria which again may be explained in several different ways. First, the complete glomerular filtrate may pass through the damaged tubular epithelium into the vascular and interstitial tissues of the kidney. In the light of Oliver's work this seems the most logical. Second, there may be mechanical blockade of the tubules with casts. Since in every case that comes to autopsy, numerous tubules are always seen which are not blocked, this does not appear to be an adequate explanation. Thirdly, the glomerular filtration rate may be reduced due to an increased intrarenal pressure due to interstitial edema and interstitial reaction. A review of the nephron structure shows that this is possible but not likely. The fourth theory is that of the existence of an intrarenal shunt. Evidence for and against this theory has already been discussed.

The clinical course of a case of anoxic nephrosis is best divided into the initial, or shock phase; the anuric, or oliguric phase, and the diuretic phase. The initial or shock phase requires that the shock be actively treated before immediate death ensues due to the shock alone. Sufficient blood, fluids and electrolytes are required in this phase to raise the patient to as near normal levels as is possible. If the patient survives the initial shock, he passes into the anuric or oliguric phase.

At that time, conservative management based on the better understanding of water and electrolyte balance, plus new concepts of the treatment of uremia usually suffice. These measures are listed in table 2. Supplemental therapy may be necessary to remove retention products and correct body chemistry. These may be achieved by the artificial kidney, peritoneal lavage, intestinal lavage or exchange transfusions. There is little doubt but that the artificial kidney is the most effective of the supplemental measures although the exact time at which it should be used is still in question. Some[15, 16, 17] believe it should be used early in the course of uremia while others believe it should be used only when there is a marked rise in nonprotein nitrogen, or hyperpotassemia above 7 mEq/L and acidosis.[18] All supplemental therapy carries with it some danger and a definite mortality. The vast majority of hospitals have neither the artificial kidney nor the specially trained team required to operate it. The ion-exchange resins are of value only in those patients able to take them by mouth. Rectal use of these resins has been disappointing.[19]

TABLE 2.

GENERAL PRINCIPLES IN THE TREATMENT OF UREMIA AFTER THE SHOCK PHASE.

1. Avoid overhydration by restricting fluids to the amount necessary to compensate for insensible water loss, plus other losses by vomiting, diarrhea, or gastric suction.
2. Electrolytes are given only if necessary to combat losses from vomiting, diarrhea, suction, acidosis, or potassium intoxication.
3. Suppression of protein catabolism by high caloric (carbohydrate) regimen.
4. Prevention of infection with antibiotics.

If the patient can be maintained in proper electrolyte balance, not overhydrated, and toxic death prevented, he then passes into the diuretic phase. This usually comes about ten to fourteen days after the onset of the anuria. At this point the patient is usually able to take fluids orally and it is then a simple matter to balance intake with output. The one pitfall which may occur at this time is that for a time the kidneys may not be capable of the excretion of sodium chloride. One should not add salt, therefore, until the urine is checked to be sure it contains chlorides. When it is evident that sodium chloride is being excreted, 4 to 6 grams of sodium chloride and later, 1 to

2 grams of potassium chloride should be added to the daily oral diet.

CASE REPORT

A 31 year old white male was admitted to St. Mary's Hospital, 45 minutes after the initial accident. A paper loader containing approximately one ton of paper overturned and pinned the patient to the floor, the majority of the load being on his chest and upper abdomen. He was released within an estimated 10 or 15 minutes, given morphine sulfate grs. ¼ and brought to the emergency room of the hospital. On admission he exhibited mild shock signs; there was no marked evidence of trauma and the blood pressure was 90/60. Nasal oxygen was started together with 1,000 cc. of glucose in water intravenously. At the end of the intravenous glucose his pressure rose to 120/80 and there were no clinical signs of shock. An admission urine obtained by catheter, which was left indwelling, showed the following results: specific gravity 1.011, pH 5.5, albumin 4+, suger 0.0075 per cent, acetone negative, occasional red and white cell. The hemoglobin was 14.2 grams, hematocrit 41, red count 4.4 million, white count 18,300 with a moderate left shift. In the next twelve hours only several ounces of grossly bloody urine were obtained. The findings were similar to the admission urine except for the blood and large numbers of casts which appeared. Intractible vomiting began so that a nasal tube was passed and constant gastric suction started. The patient perspired profusely so that 1,000 cc. of water a day was allowed as the insensible loss. Using the values given in table 3, attempt was made to slightly under correct the electrolyte loss by intravenous fluids to replace those lost in the gastric suction. This is graphically demonstrated in figure 1. We also were guided in the electrolyte replacement by frequent serum electrolyte determinations. From the calculated accumulated fluid balance and what the patient actually voided during the diuretic phase, it is obvious that we overhydrated the patient. It is probably better to allow not more than 750 cc. of water loss per day due to insensible causes, and not 1,000 cc. A method of daily accurately weighing the patient in bed would be the best means of avoiding overhydration. Here again, the majority of hospitals do not have the necessary equipment. It would also be better to base the electrolyte replacement on the actual loss of sodium and chloride in mEq. by quantitative measurements of the gastric suction fluid. If the patient is able to take fluids by mouth, those known to contain potassium should be avoided. Invert sugar was used to provide as high a caloric diet as possible and combiotic was given daily.

TABLE 3.

ELECTROLYTE VALUES IN MILLIEQUIVALENTS PER LITER.

	Na	K	Cl	
Secretions:				
Urine	40.0	20.0	40.0	
Gastric	60.4	9.2	120.0	
Suction	147.9	8.0	137.0	
Commonly Used Fluids:				
N. saline	154.0	0	154.0	
Ringers	147.0	4.0	155.5	
Lactate-Ringers	130.0	4.0	109.0	
Hartman's	89.0	0	89.0	(Bicarb.)
(1 per cent Na Lactate)				

The patient did well until the fourteenth day. On the twelfth day he put out 1,200 cc. of urine and on the next day, 2,000 cc. of urine. However, much to our surprise on the morning of the fourteenth day, instead of showing clinical improvement, he became comatose, exhibited muscular twitching and convulsions, bled from the mouth and nose, and had a marked hypertension up to 220/140. Nasal oxygen was resumed and, in an effort to remove retained toxic products, exchange transfusions were decided upon. Blood, 1,000 cc., was removed by cannulating an arm vein with no change of blood pressure. At that time, 1,000 cc. of fresh blood was started in the other arm, and when 500 cc. had been replaced, another 1,000 cc. of blood was removed while finishing the initial 1,000 cc. of fresh blood, plus a second 1,000 cc. Clinically, the effect of the exchange was remarkable. The urine output became profuse, the total for the day being 3,000 cc. By evening the patient was rational and alert, there was no twitching or convulsions, the bleeding from the nose and gums had ceased and the hypertension was less. It was thought that more blood exchange would be necessary, but they were held up due to the marked improvement. Over the next twenty-four hours the patient had a urinary output of 5,600 cc., the gastric suction was

Fig. 1

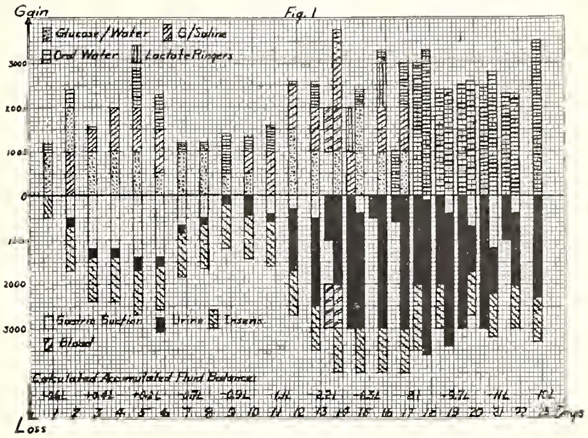
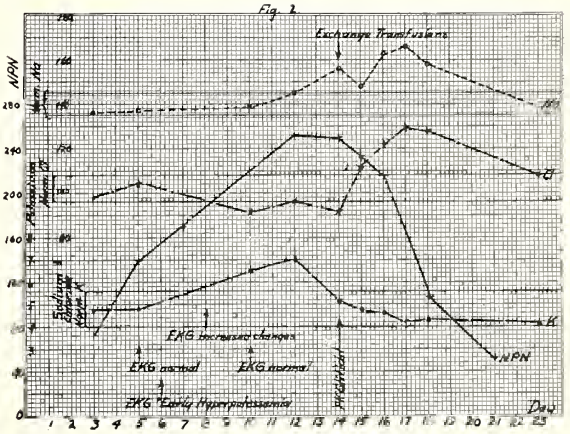


Fig. 2



discontinued and the patient vomited only 400 cc. His recovery during the rest of the diuretic phase was entirely uneventful. Six weeks after discharge from the hospital, intravenous indigo-carmine appeared from both orifices in six minutes, three months later it appeared promptly on both sides in three minutes, and an intravenous pyelogram was entirely normal. The urine was also negative on chemical and microscopic examination.

SUMMARY

1. Conservative therapy and careful fluid and electrolyte replacement is usually sufficient for the usual case of anoxic nephrosis.

2. Possible adjuncts to the treatment of anoxic nephrosis are the artificial kidney, if available, intestinal or peritoneal lavage and exchange transfusions.

3. In the case presented, where an artificial kidney was not available, marked clinical improvement was obtained by the use of exchange transfusions.

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C. W. Meinershagen, M.D.

The Ellis Fischel State Cancer Hospital, located at Columbia, Missouri, was built as a result of the action of the 1937 Legislature. This legislative body empowered a cancer commission appointed by the Governor to select a site and provide the building, facilities and services to care for the medically indigent person in the state who had cancer or a suspicion of it. From 1937 to 1940, when the hospital building was completed, the Cancer Commission operated a clinic facility for diagnosis and limited treatment of cancer at the State Hospital No. 1 at Fulton. The Cancer Commission obtained federal assistance and because of the 50 per cent PWA participation, were able to double the number of beds originally planned, to the present 104 hospital beds. The hospital was named in honor of Dr. Ellis Fischel of St. Louis, who was an original member of the Cancer Commission and who met an untimely death while en route from St. Louis to attend a Cancer Commission meeting.

The hospital provided at the outset 96 patient beds on the second, third and fourth floors; an outpatient clinic, administrative offices, and x-ray therapy facilities are located on the first floor. The remaining three floors and basement were planned for the various basic services. The fifth floor was planned for quarters for resident physicians, a library, teaching facilities and a dining room. The sixth floor contained surgery and diagnostic x-ray. The seventh floor was set up for laboratories and for research activities.

The Cancer Commission planned the hospital to be an active treatment unit and it has not been used to care for terminal cancer patients. An administrator responsible to the Commission governed the basic hospital activities. The medical activities of the hospital have been directed by a senior medical staff composed of three full time Board men in surgery, x-ray therapy and pathology. To this basic medical staff was added an internist in 1950. The senior medical staff has been capably assisted by the medical social worker in accepting and discharging patients, and in clinic follow-up of patients from all over the state. A medical residency program has existed since the hospital opened, affording the senior staff an opportunity to train physicians interested in postgraduate work in the Cancer Hospital. There are two senior residents and from four to six assistant residents. Several hospitals in the state rotate one or two resident physicians for three to six months through the Cancer Hospital services.

Clinical research is a constant activity in the follow-up and evaluation of patients and several staff conferences are held each week to accomplish this and for teaching sessions for residents using surgical, radiologic and pathologic work up of patients in the hospital. There is a planned inservice educational program for professional and auxiliary nursing personnel, and since 1951 a week's orientation program in cancer has been offered to public health nurses and faculty from schools of nursing.

The hospital has admitted to its service more than 20,000 medically indigent patients in the last seventeen years, approximately 1,500 new patients are admitted each year and 10,000 clinic visits are made either by new patients or as follow-up of old patients. The hospital operates entirely on appropriations made by the State Legislature biennially. There is no charge made to the patient. However, the county of residence is charged by law to pay the hospital $5.00 for each patient for each month or part of a month a patient is in the hospital. The hospital is operated for the citizen of Missouri who has cancer or suspicion of it, and who is declared to be medically indigent by the county court of residence. The patient's own physician or physician appointed by the county court makes the determination of cancer or suspicion of it. An application form provided by the hospital is filled out by the physician and the county court and the court formally approves admission of the patient to the hospital, and the application is mailed to the hospital. Application forms are available at all county clerk's offices, frequently are found at the county welfare office or in the office of the county nurse or county health department. The most frequent admission procedure is for a physician who sees a medically indigent patient with cancer to fill out the physician's part of the application and send the patient to the county court for verification of the indigency and completion of the application; the application then goes in to the Cancer Hospital. It is desirable for the examining physician to provide as much detail as possible of the history and physical findings. This is recorded on the second page of the application form together with laboratory and biopsy information, if any was done. This information provides

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From the Bureau of Cancer Control, Division of Health.

This is the first of articles on public medical facilities in the state which will be carried in future issues of Missouri Medicine.

the chief surgeon with necessary knowledge to evaluate the case.

The application is processed by the administrative office to determine if it is complete and correctly filled out. It is sent to the medical director and chief surgeon, who reviews the identifying information as to the nature of the disease, and determines whether the patient is to be admitted to the hospital or whether the problem can be cared for in the outpatient clinic. The hospital has no legal right to question the court's eligibility determination. If the medical social worker's interview determines that the patient is obviously able to pay for his treatment, the county court is notified, suggesting that the additional information may be helpful to them in determining that this person would not be eligible for admission.

After the application is reviewed by the chief surgeon, who indicates the status the patient is to have on the waiting list, the application is sent to the Social Service Department. The patient's name is placed on the waiting list and a written appointment is sent to the patient. The hospital is operating at full capacity (104 beds) at all times; therefore it is necessary for the patient to have a scheduled appointment. This waiting list has varied in length from 40 to 210 patients. At the present time it is approximately 60 which means a delay between the time of application and admission to the hospital of two to three weeks. If a patient has a medical or surgical emergency, his physician should call the chief surgeon and define the problem. The chief surgeon can discuss the availability of beds and suggest management until a bed is available for the patient. Even in emergencies the court should certify the residence and indigency of the patient and the papers should accompany the patient to the hospital. Many patients can be seen and treated in the outpatient clinic and hospital admission is not necessary.

The patient is admitted to the hospital through the clinic on one of the clinic days, Monday, Wednesday or Friday. When the patient is discharged, he is followed through the clinic at intervals of one to six months, for five or ten years, or for life. This follow-up observation is important to the patient to determine if his disease is controlled, and also important to the staff of the Cancer Hospital, so the cure rate of various types of cancer can be determined.

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EDITORIALS

S. B. 226

On Thursday, February 3, Senate Bill 226 was introduced in the Missouri Assembly by John W. Noble, Kennett; Michael Kinney, St. Louis, and C. R. Hawkins, Brumley. The bill was referred to the Senate Committee on Public Health and Welfare. Hearing on the bill of both opponents and proponents was set for February 28.

The Missouri Association of Osteopathic Physicians and Surgeons released a statement heartily endorsing the bill and urging the legislators to provide a single standard of competence for physicians and surgeons in Missouri.

Copies of the bill were mailed to all members of the Missouri State Medical Association together with a letter which explained briefly the bill and urged members to contact legislators for support of the measure.

It is hoped that all members will support the action of the Association's House of Delegates, which at the 1954 Annual Session, gave instructions that such a measure be promoted. It has progressed so that each member may now have a part in that support by contacting his own legislator and letting him know the member's interest in S. B. 226.

Other legislation pending at the time of publication and of interest to members includes H. B. 85, an act to regulate the separate practice of the several branches of the healing arts, requiring the various state boards to enforce the provisions of the act and providing penalties for violation. The bill was introduced on January 18 and on February 7 referred to the Committee on Public Health. The Association is opposed to this act.

H. B. 185 is an act to increase the course of study in chiropractic schools.

H. B. 186 relates to the definition of the practice of chiropractic and defines it as follows: "The practice of chiropractic is hereby defined to be the art and science of palpating the spinal column: diagnosing, and adjusting of the movable segments of the spinal column and tissues adjacent thereto by hand. It shall include the use of such supplementary measures as light, heat, electricity, cold, air, water, dietetics, rest, and exercise. It shall not include the use of operative surgery, obstetrics, osteopathy, nor the administration or prescribing of any drug or medicine. The practice of chiropractic is hereby declared not to be the practice of medicine and surgery or osteopathy within the meaning of chapters 334 and 347 Revised Statutes of Missouri, 1949, and not subject to the provisions of said chapters."

H. B. 243 relates to the practice of optometry and contains a new definition for optometry which is objected to by the Association's Committee on Conservation of Eyesight.

These bills were referred to the Committee on Public Health on February 7.

S. B.'s 59, 60, 61 and 62 relate to the state mental hospitals and laws relating to the commitment of the mentally sick. These bills are being considered by the Senate Committee on Public Health and Welfare.

97th Annual Session

Plans for the 97th Annual Session, Kansas City, March 27, 28, 29 and 30, leave only minor details that are not complete. All indications are that it will be a meeting not to be missed. Television with the large screen, excellent speakers on well selected subjects, good scientific and technical exhibits, round table luncheons, combine to furnish postgraduate work of superior value. Scientific exhibits are still being requested but all other information on the session, program, technical exhibits and delegates to the House of Delegates appear in this issue.

Assuring the excellence of the meeting are the committees that will be in charge of the session. They are:

General Committee on Arrangements: Richard H. Kiene, M.D., Kansas City, Chairman; Donald M. Dowell, M.D., Chillicothe; C. G. Stauffacher, M.D., Sedalia.

Executive Committee: William C. Mixson, M.D., Chairman; James A. Jarvis, M.D., J. Harvey Jennett, M.D., Irvin M. Birenboim, M.D., and Jack H. Hill, M.D., Kansas City.

Scientific Exhibits: John H. Mayer, Jr., M.D., Chairman, William M. Kitchen, M.D., Mark M. Marks, M.D., Martin J. Mueller, M.D., and Arthur B. Smith, M.D., Kansas City.

Arrangements: James H. O'Neil, M.D., Chairman, Ralph Emerson Duncan, M.D., William B. McCunniff, M.D., William A. Slentz, M.D., and Harry Statland, M.D., Kansas City.

Past Presidents Banquet: C. Edgar Virden, M.D., Chairman, James R. McVay, Sr., M.D., Morris B. Simpson, M.D., G. Wilse Robinson, Sr., M.D., Kansas City.

Reception: John A. Growdon, M.D., Kansas City, Chairman; O. B. Barger, M.D., Harrisonville, President, West Central Missouri Medical Society; Watkins Broyles, M.D., Bethany, President, Grand River Medical Society; B. J. Byland, M.D., Maryville, President, Nodaway-Atchison-Gentry-Worth County Medical Society;

M. E. Grimes, M.D., St. Joseph, President, Buchanan County Medical Society; M. C. Johnson, M.D., Richmond, President, Lafayette-Ray County Medical Society; Charles M. Lederer, M.D., Warrensburg, President, Johnson County Medical Society; Thomas S. Reser, M.D., Cole Camp, President, Benton County Medical Society; S. O. Schroeder, M.D., Liberty, President, Clay County Medical Society; Peter V. Siegel, M.D., Smithton, President, Pettis County Medical Society; S. P. Simmons, M.D., Marshall, President, Saline County Medical Society; W. B. Spaulding, M.D., Plattsburg, President, Clinton County Medical Society; Hugh B. Walker, M.D., Clinton, President, Henry County Medical Society; Virgil R. Wilson, M.D., Rosendale, President, Andrew County Medical Society; F. E. Hogan, M.D., Mound City, President, Holt County Medical Society; L. C. Calvert, M.D., Weston, President, Platte County Medical Society; William H. Duncan, M.D., B. Landis Elliott, M.D., Frank L. Feierabend, M.D., Carl R. Ferris, M.D., Russell W. Kerr, M.D., Thomas E. McMillan, M.D., Hubert M. Parker, M.D., Milton C. Peterson, M.D., Joseph H. Printz, M.D., Sidney Rubin, M.D., Harrison C. Trippe, M.D., and Richard A. Twyman, M.D., Kansas City.

Farm Bureau Federation Approves Prepaid Plans

The *News Letter* of the American Farm Bureau Federation, dated December 20, 1954, contains the actions of the 1954 annual meeting of the elected voting delegates of this great voluntary organization of the farmers of America. The meeting was held in New York City in early December 1954.

Mr. Charles B. Shuman of Illinois was elected president of the Federation at the session, succeeding Mr. Allan B. Kline, who retired because of ill health. Members will recall that Mr. Shuman made the address at the Annual Banquet of the Missouri State Medical Association in Kansas City in 1952. He served at that time as a "pinch hitter" for Mr. Kline who was unable to come at the last minute. Those who heard Mr. Shuman remarked that he was some "pinch hitter" and are not at all surprised that he was chosen to succeed Mr. Kline.

The following action of the delegates is of real interest to all Americans and, especially, to members of the medical profession.

HEALTH INSURANCE

"We are opposed to any form of compulsory health insurance. We favor voluntary plans which provide medical, health, dental and hospital insurance. The advantages of such voluntary plans should be given greater emphasis.

"We recognize the efforts of the medical associations to discourage those of their number who take unethical advantage of voluntary health insurance plans. Such practices increase the cost of services and tend to defeat the successful operation of prepaid hospital and medical insurance. We feel that a part of the responsibility for correcting irregularities rests with patients, who should disclose such irregularities to the grievance committees of the profession.

"We urge a friendly attitude and understanding on the part of the medical profession and hospitals toward private prepaid medical and hospital insurance plans and the principles of their operation.

"Proposals for a government reinsurance agency to deal with special health problems and diseases should not be enacted into law until there has been adequate opportunity to study the proposals and their implications, and the need for such a program has been fully established."

This statement by a great organization deserves the applause of all members as well as earnest and careful consideration of the second and third paragraphs. Need one say that paragraphs one and four exactly reflect the opinion of all members of the profession?

Let's Organize Organized Medicine

Many lay writers and lay groups today look upon organized medicine as a powerful coordinated union of physicians controlled, regulated and dominated by the American Medical Association for the sole protection of its members. Nothing could be farther from the truth. As physicians, we know the word "organized" is a misnomer when applied to medicine. No group has ever been more disorganized in the promotion of its own welfare.

Physicians as a rule are individualists both by training and necessity. Responsibility and decisions, sometimes minor, sometimes weighty, are theirs from the first day of practice throughout life. Because they are individualists they are not easily regimented, not even for their own welfare. Organizing an army composed solely of generals would be a less difficult task.

There is, however, in medicine today a small minority group who somehow have lost their individuality, if they ever had any, and seem to enjoy being led. At present a few are being well rewarded in "helping to take over." Some of their leaders, the "Professors of Corporate Medicine," occupy key positions in American medicine today. Their motives are dimmed by the sparkling haloes they hold over their own heads. Their repetitious accusations against other members of the profession ring as gospel truth only in the halls of their own select palaces of virtue. We are personally acquainted with the skeletons in their closets. Their methods are as unAmerican as is communism. Their set-up is the greatest mass cover-up for the performance of ghost surgery and fee splitting confronting American medicine today.

(*Continued on page 252*)

Missouri Medical Meetings

Missouri State Medical Association, Kansas City, March 27-30, 1955.

St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.

Barton-Dade County Medical Society—third Wednesday of each month.

Benton County Medical Society—meets only on call.

Boone County Medical Society—first Tuesday of each month.

Buchanan County Medical Society—first Wednesday of each month.

Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.

Callaway County Medical Society—third Thursday of each month.

Cape Girardeau County Medical Society—first Monday of each month.

Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.

Clay County Medical Society—last Tuesday of each month.

Clinton County Medical Society—meets only on call.

Cole County Medical Society—first Monday of each month.

Cooper County Medical Society—first Monday after the 15th of each month.

Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.

Dunklin County Medical Society—first Tuesday of each month.

Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.

Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.

Greene County Medical Society—fourth Friday of each month.

Henry County Medical Society—meets only on call.

Holt County Medical Society—meets only on call.

Howard County Medical Society—meets only on call.

Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.

Jasper County Medical Society—second Tuesday of each month, September through May.

Jefferson County Medical Society—meets only on call.

Johnson County Medical Society—meets only on call.

Laclede County Medical Society—second Monday of each month at 6:00 p.m., at the Louise Wallace Hospital, Lebanon.

Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.

Lewis-Clark-Scotland County Medical Society—meets only on call.

Lincoln-St. Charles County Medical Society—third Thursday of each month.

Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p.m.

Miller County Medical Society—meets only on call.

Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.

Moniteau County Medical Society—second Thursday of each month.

Newton County Medical Society—meets only on call.

Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.

North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.

Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.

Pemiscot County Medical Society—third Thursday of each month.

Perry County Medical Society—second Thursday of each month.

Pettis County Medical Society—third Monday each month September through May.

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.

Pike County Medical Society—third Tuesday of each month.

Platte County Medical Society—meets only on call.

St. Louis County Medical Society—second and fourth Wednesday of each month.

St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.

Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.

South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.

Vernon-Cedar County Medical Society—meets only on call.

Webster County Medical Society—meets only on call.

West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

As a noun, Webster says, "Auxiliary means a helper; an assistant." As an adjective, it means, "in a helping manner." The Woman's Auxiliary to a medical society should be organized with that definition in mind.

In the field of health education there are numerous avenues of service open to the Auxiliary. Doctors, individually or collectively, just do not have the entree to some opinion moulders and groups of people that individual doctors' wives or auxiliaries have. Even if they did, in many cases, it is doubtful if their influence would be as strong as that of the ladies. The time honored weaker sex idea is questionable here. Some one recently remarked that the weaker sex is the strongest sex because of the weakness of the stronger sex for the weaker sex. Doctors well know the power of the fair sex stimulated by a strong desire. It has been said that the most effective water power in the world is a woman's tears.

If the auxiliaries exhibit a desire to help with some of medicine's public problems or, if medical societies can generate such a desire, is it not about time the most be made of auxiliary potentialities?

The recent organization of three auxiliaries to county medical societies in Missouri has come to my attention. On October 19, 1954, the Auxiliary to the Marion-Ralls-Shelby County Medical Society was formally organized at a meeting in Hannibal. The Auxiliary to the SEMO Medical Society came into actuality on January 11, 1955, at a meeting in Sikeston. The Butler-Ripley-Wayne County Medical Society Woman's Auxiliary began operation as such on January 12, 1955, at a meeting in Poplar Bluff.

It is understood that one or two more "auxiliaries-to-be'" are on the brink of formal organization at this time.

The officers and committee personnel of the Woman's Auxiliary to the Missouri State Medical Association who have been responsible for organizing these recent auxiliaries deserve much credit. There seems to be a steady increase in interest developing over the state toward organizing and activating local auxiliaries.

The meeting of the Auxiliary during the Annual Meeting of the MSMA in Kansas City, March 27-30, has promises of being their best to date.

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Members in the News

The Wallace Hospital board and the Laclede County Medical Society, in joint session on January 11, elected **J. H. Summer**, M.D., Lebanon, president of the hospital board.

The Kansas City Society of Ophthalmology and Otolaryngology had as guest speakers on January 20 Eugene Derlacki, M.D., Chicago, and Harold Falls, M.D., Ann Arbor.

"Dr. Andy Day" was celebrated at Mount Vernon, Illinois, on January 8, the 90th birthday of Dr. Andy Hall, father of **Andy Hall, Jr.**, M.D., St. Louis.

"Pulmonary Diseases" is the title of a book edited by **Roscoe L. Pullen**, M.D., Columbia. It has recently been published by Lea & Febiger.

The Seratoma Club of St. Joseph was addressed by **H. E. Petersen**, M.D., St. Joseph, on January 5.

A special tribute was paid to **L. E. Rolens**, M.D., Granby, recently, at a reception for faculty and school board members. Dr. Rolens has served thirty-three years as a school board member.

The Randolph County Court recently appointed **P. V. Dreyer**, M.D., Huntsville, as county physician.

The Greater Kansas City Association of Medical Record Librarians had as speaker on January 12, **Raymond A. McCanse**, M.D., Kansas City, who spoke on "Traumatic Injuries."

The Cape Girardeau Chapter of the Missouri State Association of Licensed Practical Nurses were addressed on "Genito-urinary Conditions and Postoperative Care" by **L. R. Seabaugh**, M.D., Cape Girardeau, at a meeting on January 12.

Directors of the Missouri Heart Association held a meeting in Kansas City on January 9, with **J. Will Fleming**, M.D., Moberly, president, and **Earl Loyd**, M.D., Jefferson City, president-elect, presiding.

The Kansas City Surgical Society had as its speaker on January 12, Edward S. Judd, Jr., M.D., Rochester, Minn.

The Moberly Rotarians were addressed by **W. Deward Chute**, M.D., Moberly, at a noon meeting on January 6. His subject was "Me and Medicine."

"The Very Sick Patient and the Office Assistant" was the title of a talk presented by **A. Graham Asher**, M.D., Kansas City, to the Jackson County Medical Secretaries and Assistants Club on January 18.

A working model of a heart and classroom manuals were presented to the Cape Girardeau Central High School recently by officials of the Missouri Heart Association, among them **Albert M. Estes**, M.D., a past president, and **James A. Kinder**, M.D., member of the board.

The *St. Louis Post-Dispatch* recently carried a picture and article about **Walter B. Yost**, M.D., St. Louis, who celebrated his 82nd birthday and retired after a sixty-one year medical career.

The County Court recently reappointed **W. E. Koppenbrink**, M.D., Higginsville, as county physician.

Freeman Hospital, Joplin, medical staff elected **S. D. Papp**, M.D., Joplin, president; **Lawrence S. Crispell**, M.D., staff secretary, and **B. E. DeTar, Jr.**, M.D., vice president.

St. Luke's Hospital Medical Staff Association, St. Louis, at a meeting on January 14, elected **Otto S. Krebs**, M.D., St. Louis, president; **J. B. Clark**, M.D., vice president, and **Herbert C. Wiegand**, M.D., secretary and treasurer.

New officers of the medical staff of St. Vincent's Hospital are **C. A. Spears**, M.D., Pierce City; **Kenneth Glover**, M.D., Mount Vernon, vice president, and **Rosellen Cohnberg**, M.D., Monett, secretary.

The Jackson County Health Forum on January 19 was addressed by Harrison Evans, M.D., Worthington, Ohio, who spoke on "Emotional Tensions and How They Affect Daily Living."

Officers of the staff of St. Mary's Hospital, Kansas City, recently elected are **William A. Staggs**, M.D.; **Harry A. Underwood**, M.D., secretary-treasurer; **Michael Bernreiter**, M.D., **William M. Kitchen**, M.D., and **Robert M. Drisko**, M.D., executive committee.

DePaul Hospital, St. Louis, has announced the election of **E. J. Javaux**, M.D., St. Louis, as president of the staff, with **Wayne O. Gorla**, M.D., vice president, and **Charles A. Jost**, M.D., secretary.

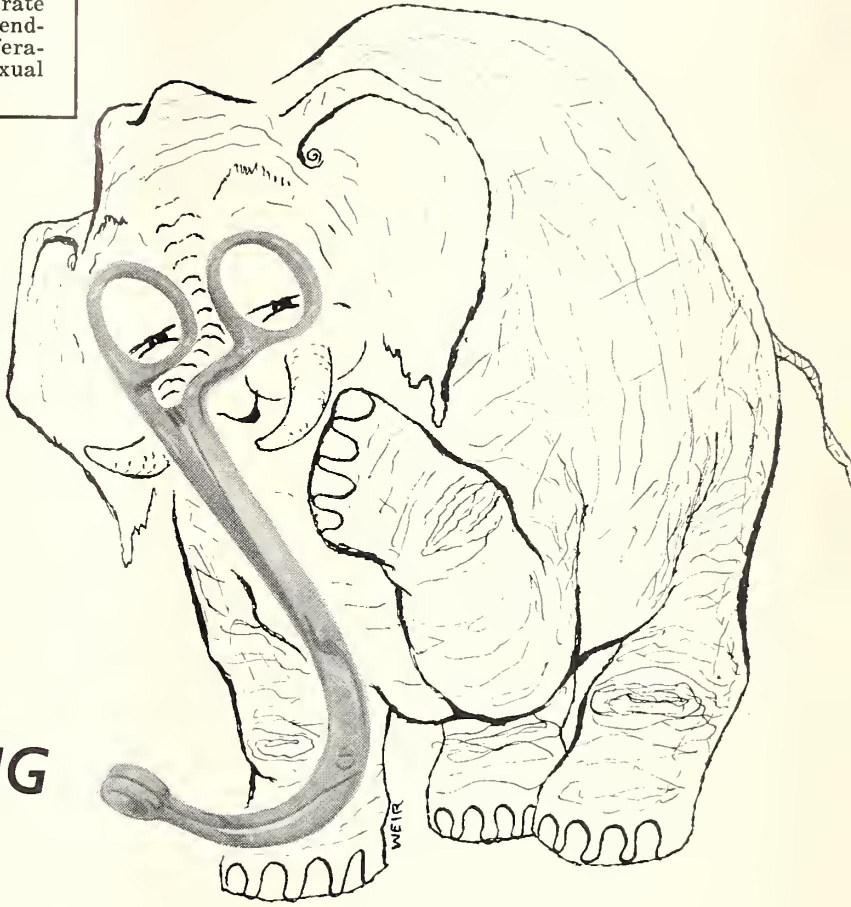
New officers of Sisters' Hospital, St. Joseph, are **Robert W. Kieber**, M.D., president; **Harold J. Brumm**, M.D., president-elect, and **Lawrence H. Pifer**, M.D., secretary-treasurer.

The following were elected officers of the medical staff of Mercy Hospital, Kansas City, **Harry M. Gilkey**, M.D., president; **Charles E. Vilmer**, M.D., vice president, and **Raymond A. McCanse**, M.D., secretary-treasurer.

Speakers addressing the United Cerebral Palsy Association of Greater Kansas City at meetings on January 18 and 25 were **Robert E. Bruner**, M.D., who spoke on "The Real Problem of Cerebral Palsy," and **Gerald E. Hughes**, M.D., who spoke on "The Pediatric Problem for Cerebral Palsy."

The ZOOID ZOO Series

zo'oid (*zō'oid*), *n.* An entity which resembles but is not wholly the same as a separate individual animal; a more or less independent animal produced by fission, proliferation, or the like, and not by direct sexual methods.



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Added as a director of the chapter board of the Kansas City-Jackson County Chapter of the American Red Cross on January 27 was **Carl R. Ferris**, M.D., Kansas City.

Mrs. Walter B. Dorsett, St. Louis, widow of the President of the Association in 1900, died on January 24 in her 95th year. She was the mother of **E. Lee Dorsett**, M.D., St. Louis.

The sixth annual Dr. F. G. Thompson, Sr., Lectureship, will be presented on May 19 by Walter C. MacKenzie, M. D., Edmonton, Canada, on "Pancreatitis, Fundamental and Clinical Aspects."

Among awards presented for outstanding service to medicine and pharmacy by the Alumni Association of the St. Louis College of Pharmacy on February 27 was one to **Alphonse McMahon**, M.D., St. Louis, the only physician to receive an award.

Mexico was named an All American City by the National Municipal League on January 17. The award was based on the outstanding initiative and action by its citizens.

Appearing on the program of the 11th annual meeting of the American Academy of Allergy in New York on February 7 to 9, were **Joseph W. Noah**, M.D., and **Stanley F. Hampton**, M.D., St. Louis.

Appearing before the Sorosis Club of Sedalia, **P. V. Siegel**, M.D., Smithton, spoke on "Community Medical Problems."

The sixth annual Major W. Seelig Lecture was presented at the Washington University School of Medicine, St. Louis, on January 19 by Robert E. Gross, M.D., Boston.

"How Should the Non-Psychiatric Physician Handle Psychiatric Problems in His Patients?" will be the subject of a talk by Dr. Robert P. Knight, before the Academy of General Practice on March 22 at the St. Louis Medical Society Auditorium. This is the E. Van Norman Emery Memorial Lecture.

The Phi Beta Pi national medical fraternity awarded a citation to **Milton D. Overholser**, M.D., Columbia, at a banquet in St. Louis on December 30. The citation was for outstanding service to the fraternity.

Public school nurses of Clay County heard **Gordon C. Sauer**, M.D., St. Joseph, discuss common skin diseases among school children at a meeting at Norclay School on January 12.

The opening talk before a quarterly convention of the Missouri Medical Secretaries and Assistants Society at Joplin in January was presented by **C. B. Schoeberl**, M.D., Joplin. His subject was "The Doctor, the Law and the Medical Secretary."

The second in a series of public information meetings sponsored by the Joplin Heart Association held in January was addressed by **William A. Sodeman**, M.D., Columbia, who spoke on "Hardening of the Arteries."

"The Routine Multipara" and "Infertility" were subjects of talks given by **Robert M. Myers**, M.D., Kansas City, before the Oklahoma Academy of General Practice in Oklahoma held in Oklahoma City, February 14 and 15.

The Kansas City Women's Chamber of Commerce was addressed on February 1 by **William L. Mundy**, M.D., Kansas City, who spoke on "Heart Disease and Its Fears, Facts and Fables."

A symposium on "Motility," sponsored recently by the New Orleans Academy of Ophthalmology, was attended by **Will R. Eubank**, M.D., Kansas City.

NEW MEMBERS

Bircher, John L., M.D., St. Louis
Bonebrake, M. D., M.D., Springfield
Burnett, Jack M., M.D., St. Louis
Delmore, J. H., M.D., Neosho
Deyton, John W., M.D., St. Louis
Grybinas, Vytautas J., M.D., St. Louis
Ivy, Henry B., M.D., Springfield
Jacobson, Donald J., M.D., St. Louis
Janzen, Erwin M., M.D., St. Louis
Jeck, Howard S., Jr., M.D., St. Joseph
Litton, Lyle D., M.D., Springfield
Michaelis, Charles, M.D., Fredericktown
Rouse, David M., M.D., Mexico
Sammons, Harry C., M.D., St. Louis
Swartz, George K., M.D., St. Louis
Wellman, Graham, M.D., Neosho
Wilkerson, Daniel D., Jr., M.D., Kansas City

DEATHS

Sheldon, John G., M.D., Kansas City, a graduate of Rush Medical College, 1899; honor member of the Jackson County Medical Society; aged 80; died January 9.

Bailey, William H., M.D., Perryville, a graduate of Hahnemann Medical College, 1902; honor member of the Perry County Medical Society; aged 81; died January 10.

Cheeseman, William B., M.D., Kansas City, a graduate of the University of Michigan Medical School, 1941; member of the Jackson County Medical Society; aged 38; died January 11.

Schlenker, John L., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1943; member of the St. Louis Medical Society; aged 37; died January 13.

Malley, John Albert, M.D., Quincy, Illinois, a graduate of the St. Louis College of Physicians and Surgeons, 1911; member of the Marion-Ralls-Shelby County Medical Society; aged 69; died January 20.

Cotton, Tolman W., M.D., Van Buren, a graduate of the Beaumont Hospital Medical College, 1893, and Barnes Medical College, 1899; member of the Carter-Shannon County Medical Society; President of the Missouri State Medical Association 1930; aged 87; died February 6.

ELECTRON PHOTOMICROGRAPH

Diplococcus pneumoniae 44,000 X

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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Clay County Medical Society

The Clay County Medical Society met at Liberty, on Tuesday night, January 25.

Dr. **Wallace Graham**, Kansas City, gave the scientific program.

A number of business matters were deferred until the next meeting of the society.

S. R. McCracken, M.D., *Secretary*

Grand River Medical Society

The Grand River Medical Society met January 13, at the Strand Hotel, Chillicothe.

Dr. Sodeman was the guest speaker.

A buffet supper was served prior to the program.

There were twenty-seven members, eighteen Auxiliary members, a few visitors and pharmaceutical representatives present, making a total of about fifty.

The scientific program was presented by Dr. **William A. Sodeman**, Professor of Medicine, University of Missouri, Columbia, who discussed "The Selection of Antibiotics in General Practice." This was followed by discussion and questions. Dr. Sodeman also gave some interesting information about Missouri's new medical school at Columbia.

We were glad to have Field Secretary Ray McIntyre with us.

Minutes of the last meeting were read and approved.

The matter of Civil Defense was discussed to some extent by Dr. **A. S. Bristow**, Dr. **Donald Dowell**, and a few others. One or two other business matters received attention prior to adjournment.

E. A. Duffy, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

W. F. FRANCKA, HANNIBAL, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

Dr. **Robert L. Jackson**, Professor and Chairman, Department of Pediatrics, University of Missouri, Columbia, spoke on "Recent Advances in Pediatrics" at a dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society on January 13.

The meeting was held in the Woodland Hospital, Moberly, with twenty-one physicians in attendance.

Before starting the scientific portion of the program, Dr. Jackson discussed the progress to date of the Four Year Medical School now shaping up at the University of Missouri.

W. D. Chute, M.D., *Secretary*

Marion-Ralls-Shelby County Medical Society

The Marion-Ralls-Shelby County Medical Society held a dinner meeting at the Mark Twain Hotel, Hannibal, on Tuesday night, January 25.

The newly-formed Woman's Auxiliary met with the Society for the first time.

The evening festivities began with a social hour followed by dinner.

The Auxiliary met with the Society for the first time.

The program for the evening was given by Mr. Ray McIntyre, Field Secretary of the Missouri State Medical Association. Ray's discussion was centered about the opportunities for service offered the Woman's

DOCTOR, here's a question and an answer you may find useful when patients ask about cigarettes:

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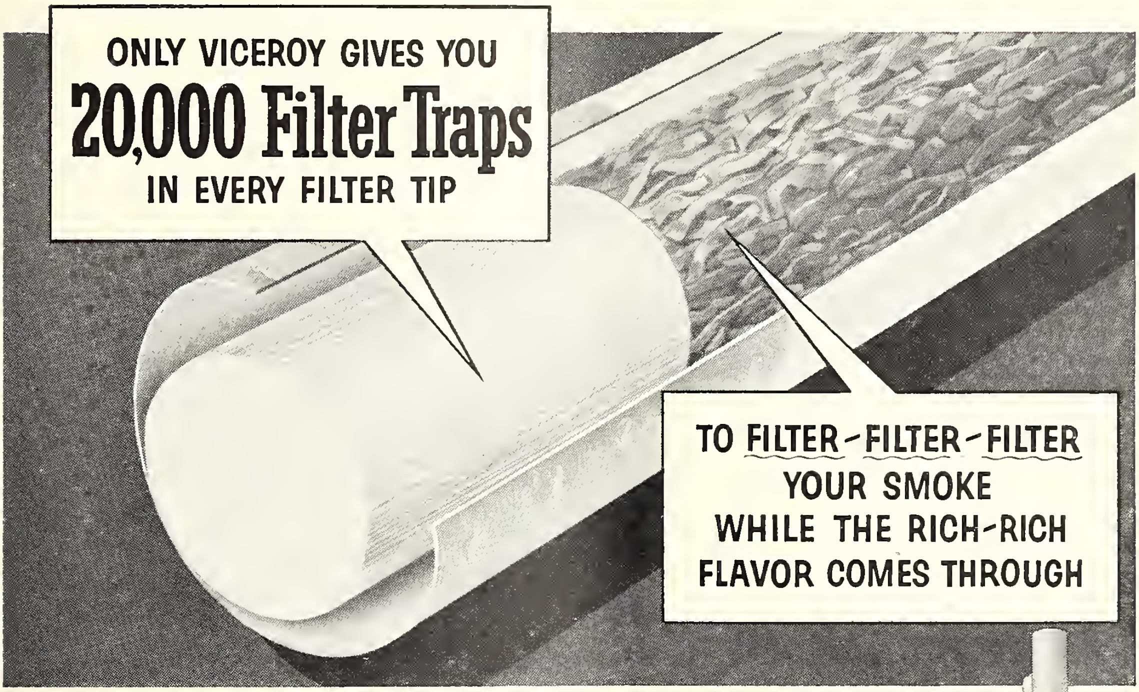
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Auxiliary to our Society. His discussion, of course, included some remarks concerning many of the problems facing medical societies, and this he tied in with potential Auxiliary activity.

The meeting was well attended.

There were thirty-one persons in attendance at this first combined meeting of the new year.

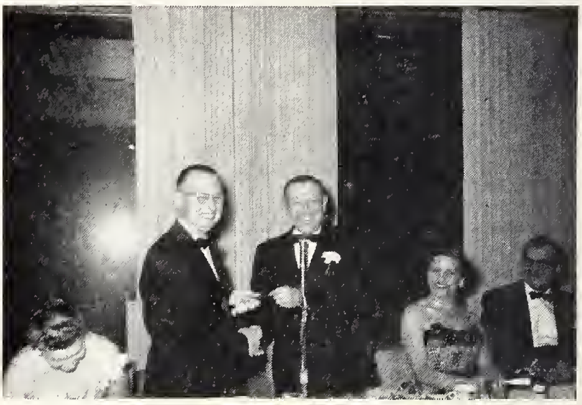
FRANCIS BURNS, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

OTTO KOCH, BRENTWOOD, COUNCILOR

St. Louis County Medical Society

On Wednesday night, January 12, amidst snow and ice, the annual dinner and installation of officers of the St. Louis County Medical Society was held at the La Chatteau Restaurant, just west of Lindberg Boulevard on Clayton Road, St. Louis County.



Dr. Diehr presented the gavel to Dr. Louis Howe.

Dr. **M. A. Diehr**, retiring president, presided on this pleasant occasion.

A number of guests were present and were introduced by Dr. Diehr.

The evening festivities began with a social hour followed by a fine dinner. The formal part of the program was short and sweet. Dr. Diehr expressed his appreciation to all those who had worked so well in assisting him during his term in office as president of the society. He then turned over the gavel to Dr.

The speakers table had many honored guests.

Louis Howe, the incoming president. Dr. Howe gave a brief, but to the point, talk and then adjourned the meeting for dancing and general visiting.

Past President of the Association, Dr. Guy N. Magness, and Mrs. Magness attended.

The good turnout for this meeting, including the presence of the many ladies, was gratifying.

GEORGE WULFF, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

J. LOREN WASHBURN, VERSAILLES, COUNCILOR

Postgraduate Course at Missouri University

The fourth postgraduate session in the series of six, being offered at the Medical School at the University of Missouri in cooperation with the Missouri Academy of General Practice during the fall of 1954 and winter of 1955, was held at the University on Thursday night, January 20.

In spite of inclement weather, thirty physicians were in attendance.

Dr. **John Tinsley**, Ellis Fischel State Cancer Hospital, Columbia, spoke on "Anticoagulation Therapy."

Dr. **M. Pinson Neal**, Professor of Pathology, University of Missouri, discussed "Pernicious Anemia."

The next session will be held on February 17 with the sixth and final meeting of the series on March 17.

J. L. WASHBURN, M.D., *Councilor*

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Bumbalo, T. S., Gustina, F. J., and Oleksiak, R. E.: J. Pediat. 44:386, 1954.

White, R. H. R., and Standen, O. D.: Brit. M. J. 2:755, 1953.

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Brown, H. W.: J. Pediat. 45:419, 1954.

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SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

West Central Missouri Medical Society

The West Central Missouri Medical Society met at the Best Cafe, Nevada, Thursday night, January 13.

The wives of many of the doctors also attended the dinner part of the meeting and then held their own separate session.

Due to the untimely death of Dr. William B. Cheeseman, Kansas City, who had been scheduled to speak, a last minute change was made in the program. **Hector W. Benoit, Jr.**, M.D., Kansas City, presented an interesting discussion on "The Emergency Management of Chest Injuries."

There were thirty-eight in attendance who were privileged to enjoy a pleasant and profitable evening.

A. L. Hansen, M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

WALTER S. SEWELL, SPRINGFIELD, COUNCILOR

Ozarks County Medical Society

In spite of adverse weather conditions, a good number of members and their wives of the Ozarks County Medical Society attended the January dinner meeting at the American Legion Hall, Monett, on Tuesday night, January 11.

The scientific program for the evening was sponsored by the Missouri Academy of General Practice. Dr. **John H. Mayer, Jr.**, Kansas City, spoke on "Emergency Management of Chest Injuries," and Dr. **Robert W. Forsythe**, Kansas City, discussed "The Emergency Management of Head Injuries." These presentations were both presented in an interesting manner and from a practical standpoint.

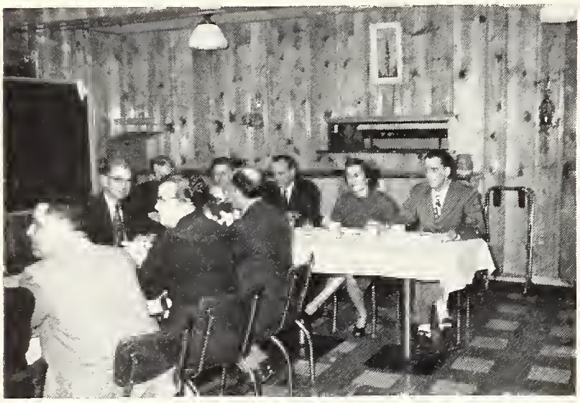
L. T. Taylor, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society

Dr. **B. L. Sinner**, St. Louis, spoke before a dinner meeting of the Phelps-Crawford-Dent-Pulaski-Maries and Laclede County Medical Societies in Rolla, on Thursday night, January 27. He spoke on "Hernias and Why They Recur." This was a most interesting and down-to-earth talk and was definitely enjoyed by all the physicians present.



Dr. B. L. Sinner, St. Louis, was the guest speaker.

Laclede County physicians also attended the meeting.

Dinner preceded the scientific program.

Many of the members' wives were in attendance, making a total of some thirty-six persons in all.

M. K. Underwood, M.D., *Secretary*

South Central Medical Society

The South Central County Medical Society met for dinner, Wednesday night, January 26, at the Arcade Hotel in West Plains with the following members and visitors present: Dr. **T. J. Burns**, Houston; Dr. and Mrs. **C. F. Callihan**, Dr. and Mrs. **M. L. Fowler**, Dr. and Mrs. **Rollin H. Smith** and Dr. and Mrs. **J. N. Wiles**, West Plains; Dr. **Garrett Hogg, Jr.**, Cabool; Dr. and Mrs. **A. T. Walker**, Mammoth Springs, Arkansas; Dr. and Mrs. **C. W. Cooper**, Thayer; Dr. and Mrs. **R. W. Denney** and Dr. **A. C. Ames**, Mountain Grove; and Dr. and Mrs. **William E. Henrickson**, Poplar Bluff.

After dinner, the ladies went home with Mrs. Wiles for the evening.

Dr. Cooper, the president, called the meeting to order and turned it over to Dr. Henrickson, the speaker of the evening. Dr. Henrickson spoke at length on infant feeding and, especially, for the first year of life; and, for what he called the "submarginal child." He showed pictures of the latter. Some of the points emphasized were: Feeding when hungry rather than

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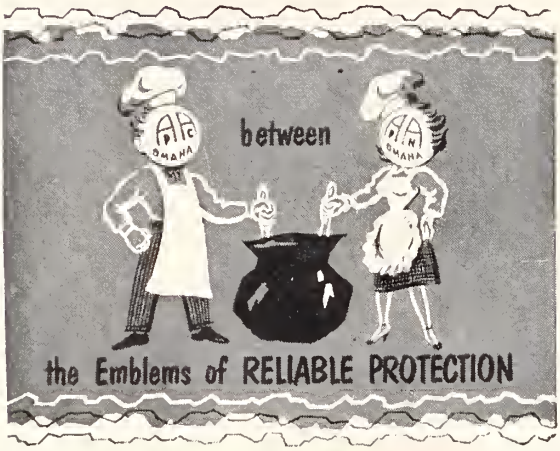
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by the clock, not forcing a child to eat when he doesn't want to eat just because one believes it good for him, and regular meals with no piecing between meals, no sleeping with the nipple in his mouth, and no feeding every time he cries.

The minutes of the last meeting were read and approved. A vote of thanks and appreciation was given the speaker.

The meeting was adjourned to meet in Houston the last week in February.

A. C. Ames, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Mineral Area County Medical Society

The regular monthly meeting of the Mineral Area County Medical Society was held at Farmington.

Dr. **Oscar P. Hampton, Jr.**, Instructor of Orthopedics, Washington University, and Orthopedic Consultant to the U. S. Armed Forces, spoke on "Skeletal Injuries About the Shoulder." Dr. Hampton showed a number of excellent slides to illustrate his lecture. This was followed by a brief period of informal discussion and questions.

The secretary's report was read and approved with no old business to be discussed.

The next order of business was the election of Dr. **Charles Michaelis**, Fredericktown, into the Society.

The meeting was then adjourned.

C. E. Carleton, M.D., *Secretary*

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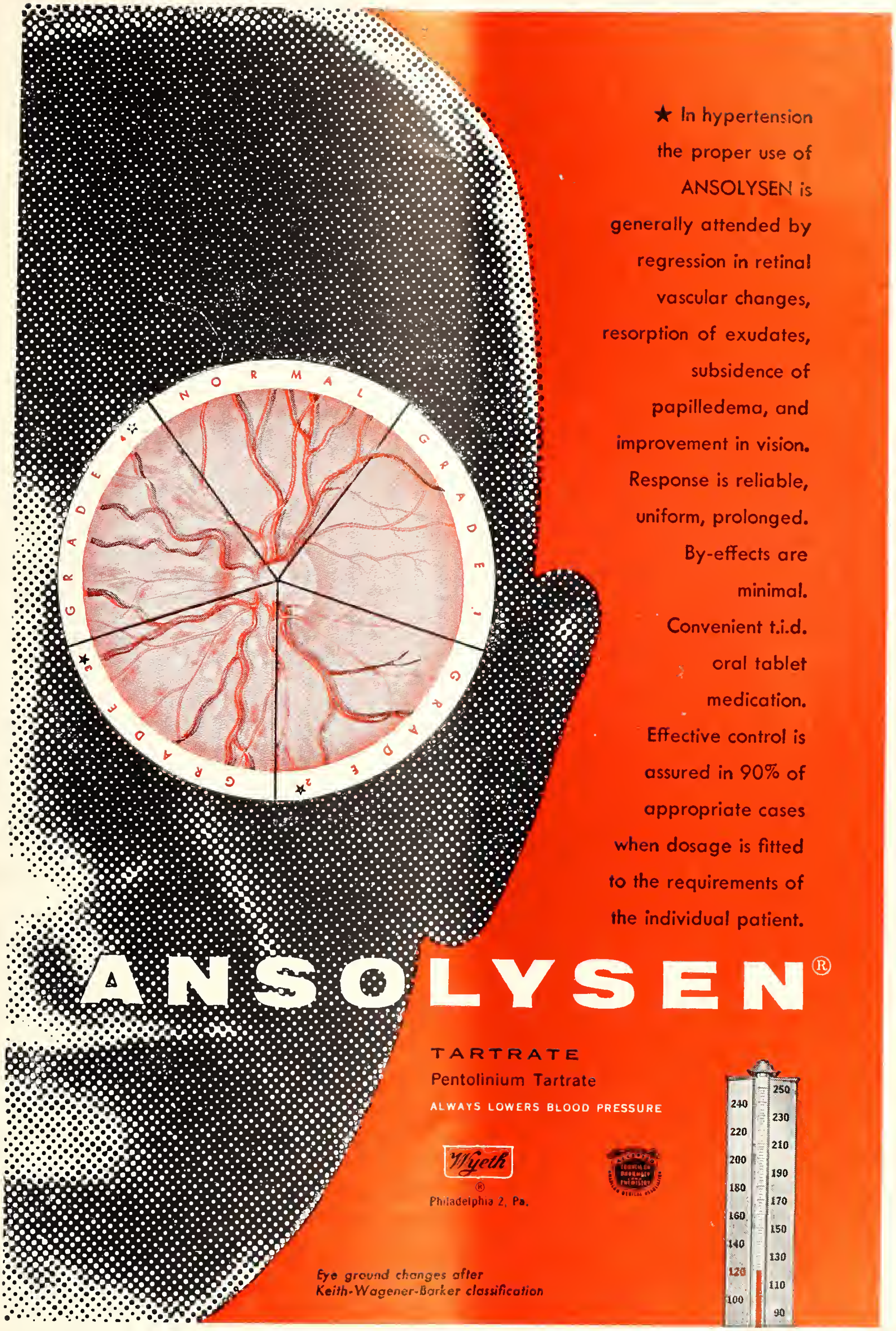

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MISSOURI STATE MEDICAL ASSOCIATION

The 97th Annual Session of the Missouri State Medical Association will be held in the Municipal Auditorium and Hotel President, Kansas City, March 27, 28, 29 and 30, 1955.

TIME AND PLACE OF MEETINGS

Sunday, March 27

12:30 p. m. Registration of Delegates, Hotel President.

1:30 p. m. House of Delegates, Junior Ball Room, Hotel President.

4:00 p. m. Reference Committee Meetings, Hotel President.

Monday, March 28

8:00 a. m. Registration, Municipal Auditorium.

8:30 a. m. Color Television, Little Theater, Municipal Auditorium.

10:00 a. m. Intermission to View Exhibits.

10:30 a. m. Scientific Session, Little Theater, Municipal Auditorium.

12:00 noon Round Table Luncheon, Hotel President.

1:45 p. m. Color Television, Little Theater, Municipal Auditorium.

2:45 p. m. Scientific Session, Little Theater, Municipal Auditorium.

3:15 p. m. Intermission to View Exhibits.

4:00 p. m. House of Delegates, Little Theater, Municipal Auditorium.

5:00 p. m. Reference Committee Meetings, Municipal Auditorium.

Tuesday, March 29

8:00 a. m. Registration, Municipal Auditorium.

8:30 a. m. Color Television, Little Theater, Municipal Auditorium.

10:00 a. m. Intermission to View Exhibits.

11:00 a. m. Scientific Session, Little Theater, Municipal Auditorium.

12:00 noon Round Table Luncheon, Hotel President.

1:45 p. m. Color Television, Little Theater, Municipal Auditorium.

2:45 p. m. Intermission to View Exhibits.

3:15 p. m. Scientific Session, Little Theater, Municipal Auditorium.

7:30 p. m. Annual Banquet, Ball Room, Hotel President.

Wednesday, March 30

8:00 a. m. Registration, Municipal Auditorium.

8:30 a. m. Color Television, Little Theater, Municipal Auditorium.

10:00 a. m. Intermission to View Exhibits.

10:30 a. m. Scientific Session, Little Theater, Municipal Auditorium.

1:30 p. m. House of Delegates, Little Theater, Municipal Auditorium.

SCIENTIFIC PROGRAM

Monday, March 28, 1955, 8:30 a.m.

Color Television, Little Theater, Municipal Auditorium

8:30 a.m. Orthopedic Cases.

9:00 a.m. Plastic Technic.

9:30 a.m. Technic of Sympathetic Nerve Block.

10:00 a.m. Intermission to View Exhibits.

Scientific Presentations, Little Theater, Municipal Auditorium

10:30 a.m. Management of Cancer of the Prostate, Elmer Hess, M.D., Erie, Pennsylvania.

11:00 a.m. Major Causes of Maternal Deaths in Missouri in 1954, Gerald L. Miller, M.D., Kansas City, Missouri.

ELECTRON PHOTOMICROGRAPH

Hemophilus influenzae 64,000 X

Hemophilus influenzae ("influenza bacillus") is a Gram-negative organism which grows only in the presence of hemoglobin. Contrary to its name, it is not the causative agent in influenza, but rather is commonly involved in

meningitis • chronic bronchitis • bronchiolitis
tracheobronchitis • supraglottic laryngitis • bronchopneumonia

It is another of the more than 30 organisms susceptible to

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11:30 a.m. Management of Occiput Posterior, Clarence D. Davis, M.D., Columbia, Missouri.

12:00 noon. Round Table Luncheon, Hotel President.

1:45 p.m. Color Television: Plastic Surgery: Operations Which Are Commonly Done.

2:45 p.m. Treatment of Hypertension, Irvine H. Page, M.D., Cleveland, Ohio.

While great improvement in the management of certain types of hypertension has been made in the last ten years, it is still far from easy or entirely satisfying. Malignant hypertension in particular can be adequately managed if treatment is begun early enough. This and other problems will be considered.

3:15 p.m. Intermission to View Exhibits.

4:00 p.m. House of Delegates.

Tuesday, March 29, 1955, 8:30 a.m.

Color Television, Little Theater, Municipal Auditorium

8:30 a.m. Office Proctology.

9:00 a.m. Differential Diagnosis of Bowel Obstruction.

9:30 a.m. Rheumatism: Practical Physiotherapy and Technic of Joint Injection.

10:00 a.m. Intermission to View Exhibits.

Scientific Presentations, Little Theater, Municipal Auditorium

10:30 a.m. The Acute Abdomen, Philip Thorek, M.D., Chicago, Illinois.

Following an eighteen year study based on clinical material, it was found that six outstanding conditions account for the greatest percentage of errors in the differential diagnosis of the acute abdomen. These conditions are outlined and discussed, and the pertinent facts pertaining to the various diagnostic signs and symptoms are evaluated. The roentgenogram as a diagnostic aid is thoroughly reviewed. The many pitfalls that one might encounter as well as the "do's and don't's" of the acute abdomen are stressed.

11:00 a.m. The Effect of Mitral Valve Surgery on the Prognosis of Individuals With Mitral Stenosis, Louis A. Soloff, M.D., Philadelphia, Pennsylvania.

The prognosis of rheumatic fever and rheumatic heart disease has improved steadily during the last century. For this reason, an analysis is made of the prognosis of rheumatic heart disease since the introduction of antibiotic therapy. This analysis suggests that not all types of disabilities or deaths could, on theoretical grounds, be prevented or postponed by mitral valvotomy. The analysis also indicates that insufficient time has elapsed to prove that mitral valvotomy has prolonged life.

Difficulties of assessing improvement due to mitral valvotomy are discussed. It is believed that the value of the operation can be determined, on the basis of short term results, only in those individuals who have had preoperatively static disability. Reasons for this statement will be visualized by means of simultaneous bi-plane stereoscopic angio-cardiography times by the carotid pulse. This technic will also be used to visualize the effects of mitral valvotomy on left atrial ventricular flow.

11:30 a.m. Acute Renal Insufficiency (Lower Nephron Nephrosis), Francis D. Murphy, M.D., Milwaukee, Wisconsin.

Acute renal insufficiency is the term applied to a condition of the kidney characterized by anuria. It may be the result of one of several causes as acute glomerulonephritis, tubular necrosis or lower nephron nephrosis. The course, which runs about two or three weeks, may be divided into three stages: (1) state of collapse and shock, (2) anuria, and (3) diuresis with complete recovery if the patient survives the second stage. The second phase of the disease is emphasized for it is in this phase that many patients die of heart failure, uremia or convulsions, and proper treatment may save the patient's life. Treatment consists of tiding the patient over this critical period or until the kidney heals sufficiently to carry on its work.

About 90 patients with acute renal insufficiency were studied within the last ten years at Marquette University School of Medicine and the Milwaukee County Hospital. The results of this study are reviewed, with emphasis being placed on conservative therapy. Experience with the artificial kidney, after all conservative methods of treatment have failed, is also discussed.

12:00 noon. Round Table Luncheon, Hotel President.

1:45 p.m. Color Television: Clinical Pathologic Conference.

2:45 p.m. Intermission to View Exhibits.

3:15 p.m. The Nutritional Management of Infants and Children, Robert L. Jackson, M.D., Columbia, Missouri.

3:45 p.m. The Surgical Correction of Funnel Chest (Pectus Excavatum), Rollins S. Hanlon, M.D., St. Louis.

4:15 p.m. Chest X-Ray in the Diagnosis of Lung Cancer, L. Henry Garland, M.D., San Francisco, California.

Types of examination: 1. Survey examination, 2. routine x-ray examination, 3. radiologic examination. The potential yield in these three types of examination will be considered. Methods for improving that yield will be suggested.

Roentgen Diagnosis of Lung Cancer: The "earlier" roentgen findings include (1) unilateral hilar enlargement, (2) small peripheral density under 1 cm. in diameter, (3) peripheral abscess, (4) localized infiltration or pneumonitis, (5) localized emphysema, and (6) localized (segmental) atelectasis. The later findings include peripheral nodules more than 2 cm. in diameter, lobar atelectasis, pleural effusion and bone involvement. The differential diagnosis of the "earlier" and potentially more curable lesion will be stressed. Experiences based on a recent review of 600 cases of chronchogenic carcinoma seen at the San Francisco Hospital will be summarized.

Tuesday, March 29, 7:30 p.m., Ballroom, Hotel President

Annual Banquet in Honor of Past Presidents

H. E. PETERSEN, M.D., St. Joseph, President, Presiding

Choral Presentation, Central High School Concert Choir, St. Joseph, Mr. Marvin Gench, Jr., Director.

Presentation of Past Presidents.
Presentation of 50 Year Pins.
Installation of the President, Victor B. Buhler, M.D., Kansas City.
Presentation of Past President's Key.
What's Right With Medicine?, Elmer Hess, M.D., Erie, Pennsylvania, President-elect, American Medical Association.

Wednesday, March 30, 1955, 8:30 a.m.

Color Television, Little Theater, Municipal Auditorium

8:30 a.m. Indications for and Demonstration of Lobectomy for Chronic Pulmonary Infections.

9:00 a.m. Medical Management of Different Phases of Tuberculosis.

9:30 a.m. Practical Application of Exfoliative Cytology as a Diagnostic Procedure.

10:00 a.m. Intermission to View Exhibits.

Scientific Presentations, Little Theater, Municipal Auditorium

10:30 a.m. Diabetes in Children: Prevention of Complications, Priscilla White, M.D., Boston, Massachusetts.

11:00 a.m. Medical Responsibility in Rehabilitation Programs, Robert Elman, M.D., St. Louis, Missouri.

An adequate rehabilitation program in terms of effectively restoring the disabled indigent citizen from tax-consuming to tax-paying activity is an important part of the community's responsibility. In this process medical aid is necessary in all cases in terms of examination and in about 35 per cent of the cases in terms of medical therapy. Medical aid is also of value in vocational guidance and in job placement, yet the medical profession has lagged behind other groups in assuming responsibility for this important problem. Evidence will be presented to show how the intimate participation of qualified physicians can gradually expand the scope of rehabilitation, and the tremendous benefits which can follow.

11:30 a.m. Cancer: An Evaluation of Surgical Treatment, George Crile, M.D., Cleveland, Ohio.

During the last ten years, surgeons have made a valiant attempt to extend the curability of cancer by performing supra-radical operations. The time has come to evaluate these procedures and see whether they are actually doing good or whether, perhaps, they are not only failing in their purpose of cure but also shortening life by disseminating cancer and by making the patient more uncomfortable during the months of survival.

It is suggested that no general rules can be applied to cancer because the natural history of cancer is so variable and each individual case is a separate problem.

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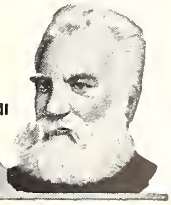

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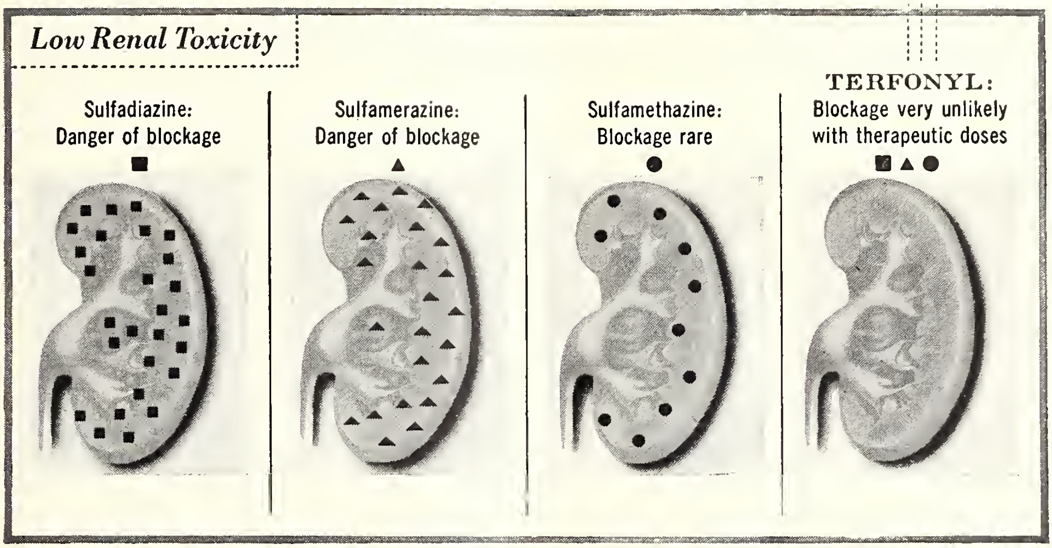
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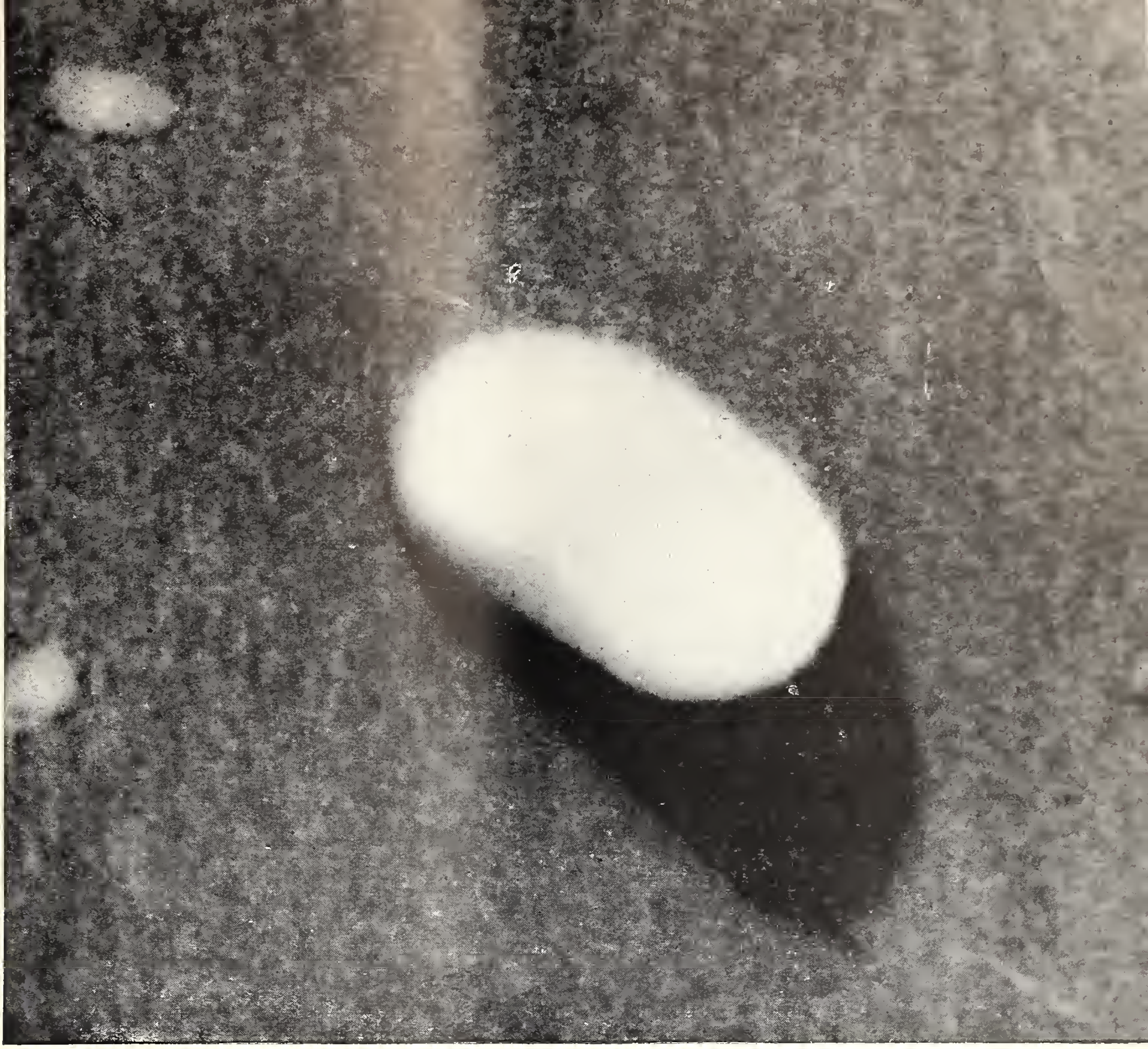

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Liquid Lactum and Powdered Lactum, infant formula products with balanced caloric distribution, are featured in the Mead Booth. Also on exhibit are Poly-Vi-Sol and Tri-Vi-Sol, with their new "Safti-Dropper"; Mulcin, the good tasting multi-vitamin liquid; and Sustagen, the complete food for tube or oral feeding.

THE BORDEN COMPANY, NEW YORK. BOOTH 15.

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THE UPJOHN COMPANY, KALAMAZOO, MICH. BOOTH 20.

Members of the medical profession are invited to visit the Upjohn Booth where members of The Upjohn Company professional detail staff are prepared to discuss subjects of mutual interest.

DOHO CHEMICAL CORPORATION, NEW YORK. BOOTH 25.

Doho Chemical Corporation is pleased to exhibit: Auralgan, the ear medication for the relief of pain in otitis media and removal of cerumen; New Orosmosan, the effective nontoxic ear medication which is fungicidal and bactericidal (gram negative-gram positive) in the suppurative and aural dermatomycotic ears; Rhinalgan, the nasal decongestant which is free from systemic or circulatory effect and equally safe to use on infants as well as the aged. Mallon Chemical Corporation, subsidiary of Doho, is also featuring Rectalgan, the

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Ciba Pharmaceutical Products, Inc., Summit, N. J. Booth 27.

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Dairy Council of Greater Kansas City, Kansas City. Booth 28.

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Based on Weight Control Studies at Michigan State College, it demonstrates vividly the role of dairy foods in a reducing diet. It is authentic, up-to-date; in fact, has been endorsed by the recent Iowa State Weight Reduction Symposium. It includes exceptionally fine pictures of daily meals, showing that Weight Reduction does not mean starvation. Visit Booth 28.

United Medical Equipment Company, Kansas City. Booth 29.

The new Profexray "Rocket" with full capacity at 100 MA, which makes this equipment 33 to 400 per cent faster than conventional 100 MA self-rectified equipment, is exhibited. Also on display are the new PC-3 Cardiotron—direct writing—electrocardiographic machine, the all new Birtcher Ultrasonic unit, the E. P. L. portable Meta-Basal, plus the new CMD-10 Microtherm.

Riker Laboratories, Inc., Los Angeles. Booth 30.

Riker Laboratories presents "Pentoxylon," a new and more complete therapy in angina pectoris. "Pentoxylon" combines the actions of "Rauwiloid," the alseroxylon fraction of Rauwolfia serpentina and of pentaerythritol tetranitrate (PETN). A truly important step toward providing a solution to the total clinical problem of angina pectoris. Visit Booth 30 for complete information.

Sanborn Company, Cambridge, Mass. Booth 32.

Featured at the Sanborn Company Booth 32 is a continuous demonstration of the new Sanborn Viso-Scope, a 5-inch cathode ray oscilloscope, specially designed for use with the Sanborn direct-writing electrocardiographs, such as the famous Viso-Cardiette—as well as with more elaborate recording systems used in the research laboratory.

The Viso-Cardiette itself also is prominently displayed, as is the popular Sanborn Metabulator. In addition, full data will be available on Sanborn 1, 2 and 4-channel direct-writing recording systems: the Twin-Beam photographic recorder for simultaneous phonocardiography: the Electromanometer, for physiologic pressure measurements: and other Sanborn equipment for cardiovascular diagnosis and research.

E. F. Hutton & Company, Kansas City. Booth 33.

The E. F. Hutton & Company invite you to keep up with market and current financial information on the Dow-Jones news ticker in their Booth 33. Literature and posters descriptive of ownership in American industries in the forms of stocks and bonds and mutual funds and general information is available.

S. J. Tutag & Company, Detroit. Booth 34.

Featured at the S. T. Tutag & Company Booth are Vagimine inserts, the ideal approach for vaginal infections. Vagimine offers a 7-way attack on trichomonal and monilial vaginitis. Vagimine now makes vaginal smears unnecessary in determining the course of therapy. They are dainty, easy to use and economical.

R. J. Reynolds Tobacco Company, Winston-Salem, N. C. Booth 35.

Welcome to the R. J. Reynolds Tobacco Company Exhibit! You are cordially invited to receive a cigarette case (monogrammed with your initials) containing your choice of Camel, Cavalier King Size, or Winston, the distinctive new king size, filter cigarette.

Sharp & Dohme, Philadelphia. Booth 36.

The many indications for "Hydrocortone" or "Cortone" highlights the therapeutic importance of these hormones in everyday practice. A new anesthetic agent "Cyclaine" Hydrochloride with qualities suitable for such forms of regional anesthesia as infiltration, nerve block, spinal, caudal and topical is of interest. Research data relative to more effective therapy when penicillin is used in conjunction with "Benemid" completes the exhibit. Expertly trained personnel solicit discussions on these observations.

Zimmer Manufacturing Company, Warsaw, Ind. Booth 37.

Among many new items shown are the Robbins Automatic Tourniquet with certain new accessories, Explosion Proof Models of both the Luck Bone Saw and the Brown Electro-Dermatome, and a number of new splints by Denis Browne of London, England.

Pet Milk Company, St. Louis. Booth 38.

We will be pleased to have you stop and discuss the variety of time-saving material available to busy physicians. Our representatives are on hand to discuss the merits of "Pet" Evaporated Milk for infant feeding and Instant "Pet" Nonfat Dry Milk for special diets. A miniature "Pet" Evaporated Milk can will be given to all visitors.

AMES COMPANY, INC., ELKHART, IND. BOOTH 39.

Clinitest, for urine-sugar analysis, is standardized. This assures uniformly reliable results whenever and wherever a test is performed—office, ward, clinic or patient's home.

Ictotest, a 30-second tablet test for the detection of urine bilirubin as an aid to early diagnosis and management of jaundice and hepatitis is demonstrated.

WM. P. POYTHRESS & CO., RICHMOND, VA. BOOTH 40.

The mild sedative, Solfoton, and the effective antiasthmatic, Mudrane, are featured at the Poythress exhibit. Physicians attending the meeting are cordially invited to visit Booth 40 where information, samples and literature on all Poythress specialties will be made available for the asking.

DUMAS-WILSON & COMPANY, ST. LOUIS. BOOTH 41.

ABBOTT LABORATORIES, NORTH CHICAGO, ILL. BOOTH 42.

Abbott Laboratories display Erythrocin, the antibiotic of wide range activity against "coccal" organisms; Tronothane, Abbott's new non-"caine" topical anesthetic; Blutene, the non-hormonal oral drug for treatment of functional uterine bleeding; Covicone Protective Skin Cream for protection against certain contact dermatoses; and Sucaryl, a non-caloric sweetener which has no aftertaste and is useful for diabetic and weight reducing diets. Numerous other Abbott products—nutritional supplements, antibiotics, antihistamines—also are exhibited.

SANDOZ PHARMACEUTICALS, HANOVER, N. J. BOOTH 44.

Sandoz Pharmaceuticals cordially invites you to visit our display at Booth 44. Fiorinal, a new approach to therapy of tension headaches; Plexonal, new sedative-hypnotic, developed on a new pharmacologic approach; Bellergal, potent autonomic inhibitor in a variety of psychosomatic disorders; Acylanid with advantages of digitoxin but the safety of whole leaf digitalis; Cafergot, available in oral and rectal form for effective control of head pain in migraine and other vascular headaches; Belladenal, an antispasmodic sedative for the control of hypermotility with pain and hypersecretion of the intestinal tract. Our representative, Mr. Edwin Haas, will gladly answer questions about these and other Sandoz products.

THE NATIONAL DRUG COMPANY, PHILADELPHIA. BOOTH 47.

You are cordially invited to visit the Booth of The National Drug Company. The featured product is Parenzyme Intramuscular Trypsin. Parenzyme Intramuscular Trypsin is a new, effective weapon against acute local inflammation. It restores local circulation with dramatic benefits in Phlebitis (thrombophlebitis and phlebothrombosis); ocular inflammation (iritis, iridocyclitis and chorioretinitis); traumatic wounds and varicose and diabetic leg ulcers. Parenzyme Intramuscular Trypsin is based on an entirely new concept of biological continuity—in terms of clinical enzymology. In small doses, it initiates physiologic mechanisms—and dramatically restores circulation, expedites repair of tissue and prevents tissue necrosis.

ENCYCLOPEDIA AMERICANA, GRAND RAPIDS, MICH. BOOTH 48.

We cordially invite you to inspect the 1955 edition of "Encyclopedia Americana," the finest in our 126 year history. We also display "Book of Knowledge" for Children—both keyed to our American school system and included in one offer. All those who register at our booth will receive a 48 page World Atlas with our compliments.

THE BLUE LINE CHEMICAL COMPANY, ST. LOUIS. BOOTH 49.

Bluline features Syrup Multifuse Citrate, N.N.R. (Brand of Piperazine Citrate) a pleasant tasting cherry flavored anthelmintic, highly effective in the treatment of oxyuriasis and ascariosis.

Inserfem Vaginal Tablets, a comprehensive treatment for trichomoniosis, Moniliosis and nonspecific vaginal infections.

Barhoma Elixir and Tablets, an antispasmodic-sedative widely useful, especially in the treatment of gastrointestinal disorders.

WINTHROP-STEARNS INC., NEW YORK. BOOTH 50.

Theominal R.S. (Theominal with Rauwolfia serpentina), an alliance of the classic and contemporary in antihypertensive compounds. Theominal R.S. combines the vasodilator and myocardial stimulant actions of theobromine and Luminal with the moderate central hypotensive effect of Rauwolfia serpentina. Gentle sedation calms the patient and a feeling of "relaxed well being" is established. Headache and vertigo disappear as the blood pressure and pulse rate are reduced gradually.

THE MEDICAL PROTECTIVE COMPANY, FORT WAYNE, IND. BOOTH 51.

An unparalleled record of successful malpractice protection since 1899 distinguishes The Medical Protective Company from all others. Year in and year out 99.94 per cent of its policyholders have been completely covered under $2,500. It's a sustained record that causes Medical Protective to be considered the Doctor's most secure source of security.

EATON LABORATORIES, INC., NORWICH, N. Y. BOOTH 52.

For prompt results in urinary tract infections, Furadantin® is now available in the form of tablets and as Furadantin Oral Suspension N.N.R. Within 30 minutes after ingestion of this drug, the urine becomes strongly antibacterial.

The latest dosage forms of the topical antibacterial agent Furacine® include Furacin Soluble Powder and Furadin Urethral Suppositories.

PRODUCERS CREAMERY COMPANY, SPRINGFIELD, MO. BOOTH 53.

The Daricraft Evaporated Milk exhibit presents information relative to the distinctive characteristics of that product for infant feeding. Several other

Daricraft Milk products are also displayed. A selection of office forms, which may be ordered by doctors, are available at the Daricraft exhibit.

Medic-Aire, St. Paul, Minn. Booth 54.

Traction therapy is the most efficacious conservative treatment for herniated disks. Medic-Aire is the ultimate in intermittent or constant traction as it provides pneumatic muscle massage for relaxation before, during and after traction. Only air can treat with such gentleness over a wide range of speeds and pressures.

Geigy Pharmaceuticals, New York. Booth 58.

Geigy features Council Accepted Butaxolidin, oral nonhormonal antiarthritic, and Tromexan, oral anticoagulant of rapid action, little cumulation and diminished risk of sustained or severe hemorrhage. Also on display is Eurax Cream and Lotion, antipruritic and scabicide, and Sterosan Cream and Ointment, bacteriostatic and fungistatic for treatment of pyogenic and mycotic skin disorders.

Audio-Digest Foundation, Glendale, Calif. Booth 59.

Audio-Digest Foundation—a nonprofit subsidiary of the California Medical Association—gives a busy physician an effortless tour through the best of current medical literature each week. This medical "newscast"—compiled and reviewed by a professional board of editors—may be heard in the physician's automobile, home or office. The Foundation—whose profits are distributed among the nation's medical schools—also offers tape-recorded medical lectures by nationally-recognized authorities.

Pfizer Laboratories, Brooklyn. Booth 60.

You are invited to visit the Pfizer Booth. Terramycin Intramuscular, Cortril, Bonamine and Tyzine are the highlights this year of a star-studded cast including the complete line of Tested and Proved Terramycin dosage forms, Tetracyn, the latest broad spectrum antibiotic and the Steraject line of injectable Penicillin and Combiotic preparations.

A. S. Aloe Company, St. Louis. Booths 61 and 62.

The Coca-Cola Company, New York. Booth 63.

Ice-cold Coca-Cola served through the courtesy and cooperation of the Kansas City Coca-Cola Bottling Company and The Coca-Cola Company.

MISSOURI SOCIETY OF MEDICAL TECHNOLOGISTS
MUNICIPAL AUDITORIUM, KANSAS CITY
MARCH 27, 28, 29, 1955

Sunday, March 27

1:30 p.m. Registration.

2:00 p.m. Business Meeting.

6:00 p.m. Buffet Supper at Benish's.

Monday, March 28

9:00 a.m. Invocation.

Blood Bank

9:05 a.m. Role of the Technician in Civil Defense, Carroll P. Hungate, M.D., Senior Medical Officer, Olathe Naval Air Station.

9:35 a.m. Albumin Cross Match, E. Bossom, M.T. (ASCP).

10:00 a.m. Intermission. Problem Clinic.

10:30 a.m. Comparison of Bone Marrow Spreads and Section, Harry Agress, M.D., St. Louis.

11:00 a.m. Blood Substitutes, Samuel Allen, M.D., General Hospital, Kansas City.

12:00 noon. Round Table Discussion Luncheon, Hotel President.

Hematology

2:00 p.m. Staining Technic, Dr. Skellman, M.D., General Hospital, Kansas City.

2:30 p.m. Blood Clotting and Prothrombin, Sister Eloise, SSM, M.T. (ASCP).

3:00 p.m. Intermission. Problem Clinic.

3:30 p.m. Erythroblastosis, B. Fiorello, M.T. (ASCP), St. Mary's Hospital, Kansas City.

4:00 p.m. Recruitment Film.

Tuesday, March 29

Clinical Chemistry

9:00 a.m. Blood pH, Myron Jorgensen, Ph.D., University of Kansas City.

9:30 a.m. Electrophoresis.

Thank you doctor for telling mother about...

FLAVORED
Children's Size
BAYER
ASPIRIN
BAYER
Genuine
24 TABLETS
2½ gr. ea
PRICE 15¢
THE BEST TASTING ASPIRIN YOU CAN GIVE YOUR CHILD

T The Best Tasting Aspirin you can prescribe

T The Flavor Remains Stable down to the last tablet

15¢ Bottle of 24 tablets (2½ grs. each)

We will be pleased to send samples on request

THE BAYER COMPANY DIVISION of Sterling Drug Inc., 1450 Broadway, New York 18, N. Y.

10:00 a.m. Intermission. Problem Clinic.

10:45 a.m. Blood Sugar Determinations, Priscilla White, M.D., Boston, Mass.

11:30 a.m. Laboratory Aspects of Heart Catherization, Dr. Linn, M.D.

Microbiology and Parasitology

2:00 p.m. Acute Phase Reaction and C Reactive Protein, Dr. Tom Hamilton, Kansas University Medical Center.

2:30 p.m. Slide Cultures for TB, Lloyd Hedgecock, Ph.D., Research Bacteriologist, Veterans Hospital, Kansas City.

3:00 p.m. Intermission. Problem Clinic.

3:30 p.m. A Few Cases, Mary Larson, Ph.D., University of Kansas.

4:00 p.m. New Technics for the Detection of Amoebae, C. C. Gullett, M.D., Assistant Medical Director, Trans World Airlines, Kansas City.

Wednesday, March 30

Serology and Tissue

9:00 a.m. Papanicolaou Preparations, Dr. Ann Pollack, Kansas University Medical Center.

9:30 a.m. Cytological Diagnosis of Gastrointestinal Cancer, Dr. Arthur Koltz, Veterans Hospital, Kansas City.

10:00 a.m. Intermission. Problem Clinic.

10:30 a.m. Common Errors in Serological Procedure, Miss Alwilda Wallace, Missouri Public Health.

News From the Medical Schools

(Continued from page 182)

the late Mrs. Kathleen McBride Love Kelley, was announced January 27 by the Very Reverend Paul C. Reinert, S.J., president.

The benefits of this Professorship, to be known as the "Kathleen McBride Love Kelley Chair of Pathology," will be assigned to Dr. Henry Pinkerton, Professor of Pathology and Director of the Department. The donor specifically chose the Department of Pathology in memory of his mother because of his interest in the work of Doctor Pinkerton, whose department is engaged in numerous projects, including exhaustive studies in the nature of cells and cancer research.

The pathologist is distinguished for his research in the field of viral and rickettsial diseases. Among his outstanding contributions to medical science, is the research he did on the typhus fever group from 1919 to 1940. During this period, he demonstrated that the European typhus was the same as found in the new world. He made a significant contribution in the attack upon typhus by showing the effectiveness of Paba (Paraminobenzoic Acid), before the advent of antibiotics, and has recently assisted medicine in combatting typhus.

Dr. Pinkerton joined Saint Louis University's School of Medicine as Pathology Director in 1938, coming from the faculty of Harvard Medical School. He was awarded his Bachelor of Science degree from the Massachusetts Institute of Technology in 1918, and his M.D. from Harvard in 1924.

During the years 1917, 1918 and 1919, he occupied the post of Clinical Pathologist in Base Hospital No. 5 with the United States Army in France. During part of this period, he accompanied the Typhus Research Commission to Poland as Pathologist under the auspices of the League of Red Cross Societies. In 1937 he visited Peru as Pathologist to the Harvard Peruvian Expedition for the study of Carrion's Disease.

Mr. Love, the donor of the gift chair in Pathology, is a former Saint Louisian, now engaged in business in western oil fields. He has two sisters: Mrs. Jack C. Cavin, 4951 Pershing, St. Louis; and Mrs. Thomas Rogers Shephard, Charlottesville, Virginia. Their mother, Mrs. Kelley, died in St. Louis in 1952. Mr. Love's grandparents, Mr. and Mrs. William Cullen McBride, were donors of the W. C. McBride Catholic High School to the archdiocese of St. Louis.

In commenting on the foundation, Father Reinert praised the gift as a fruitful addition to the University's resources. "Too many gifts made to educational institutions actually increase the school's liabilities. Mr. Love's gift strengthens the operation of the University as a working institution. Fortunately this foresight is becoming more characteristic of donors," he said.

Dr. Daniel L. Sexton, assistant professor of clinical medicine, assumed the office of President of the St. Louis Medical Society at an annual meeting held January 3. Dr. Louis H. Kohler, associate professor of clinical neurology and psychiatry, and superintendent of St. Louis State Hospital, has been named president-elect for 1956.

The following alumni were elected as officers of the St. Louis County Medical Society at the installation banquet, which was held on January 12 at Le Chateau: President, Dr. Louis F. Howe; vice president, Dr. James F. Dowd, senior instructor in surgery; and Dr. George Wulff.

Three School of Medicine faculty members were participants in a panel before the Second National Conference of the Association of Operating Room Nurses held at Hotel Jefferson January 24 to 27. Dr. Edmond Smolik, associate professor of neurological surgery, took part in a round-table on Neuro-Surgery, while Dr. C. Rollins Hanlon, professor of surgery, and Dr. James Mudd, associate professor of surgery, were participants in discussions on thoracic surgery.

MISSOURI SOCIETY OF ANESTHESIOLOGISTS

The Annual Meeting of The Missouri Society of Anesthesiologists will be held March 13, 1955, at the Muehlebach Hotel, Kansas City.

The Program is as follows:
10:30 a.m. Business Meeting.
1:00 p.m. Luncheon.
2:00 p.m. Scientific Meeting.

"Denitrogenation, Rebreathing, and Resistance During Inhalation Anesthesia," William K. Hamilton, M.D., Iowa City.

"Anesthetic Management of Patients for Intracardiac Surgery," Kenneth K. Keown, M.D., Philadelphia.

"Modern Aspects of Cardiac Resuscitation," Hugh E. Stephenson, Jr., M.D., Columbia.

Book Reviews

CORONARY HEART DISEASE IN YOUNG ADULTS by Menard M. Gertler, M.D., and Paul D. White, M.D., with the aid, advice and Editorial Assistance of E. F. Bland, M.D.; J. Fertig, Ph.D; S. M. Garn, Ph.D; J. Lerman, M.D.; S. A. Levine, M.D.; H. B. Sprague, M.D.; N. C. Turner, M.S. Harvard University Press, Cambridge, Mass. 1954. Price $5.00.

The subtitle of this book calls it "A Multidisciplinary Study" and it is that in every sense of the word; in fact that are so many disciplines involved that the reviewer found himself frequently lost in a maze of unfamiliar subjects, some closely and others remotely related to his previous conceptions of coronary heart disease. Included in the study are not only the current controversial problems of the relation of coronary disease to heredity, obesity, dietary cholesterol, but also the more profound subjects of anthropometric values and biochemical studies of the oxidation-reduction potentials of saliva.

An interesting discussion which should give rise to a closer evaluation of the individual is developed in the chapter which deals in detail with the subject of overweight and obesity in the appraisal of physique in relation to coronary heart disease. The conclusion that on the basis of the evidence studied "one may seriously question the merits of a low cholesterol diet and its role in lowering serum cholesterol" will please those who like their butter and eggs but they should read further and note the statement "that weight reduction reduces serum lipids."

The many tables in the body of the book and in the appendices are well prepared though sometimes so complete as to be confusing, or at least requiring intense concentration for adequate understanding. The tables in the chapter on clinical appraisal of the coronary group of patients may well make one modify some of his fixed ideas about the clinical aspects of coronary disease.

It seems too bad that in a book with this title that at least a chapter on pathology with a consideration of the question of infectious arteritis versus arteriosclerosis as the etiologic factor in coronary heart disease in young adults was not included.

For those interested in coronary disease, especially from the research viewpoint, the book should be read and the clinician will be stimulated by this study.
A. E. S.

THE MEANING OF SOCIAL MEDICINE by Iago Galdston, M.D., Secretary Medical Information Bureau, the New York Academy of Medicine. Published for The Commonwealth Fund by Harvard University Press, Cambridge, Mass. 1954. Price $2.75.

The purpose of this treatise is to define and explain social medicine, which is a science in the making, visualized by only a few men here and abroad. Dr. Galdston defines social medicine, or rather differentiates it, through comparisons with other types of medicine, each of which forms a part of this concept. England is the leader in the field and a few centers have been started there for research.

Social medicine is different from public health, preventive medicine, clinical medicine, state or socialized medicine. In fact, the latter two are only administrative technics for the application of the first three.

Public health encompasses those activities that are undertaken for the prevention of disease and the promotion of health which are, primarily, a community responsibility. Preventive medicine encompasses those activities that are the direct responsibility of the individual in the prevention of disease and in the protection and promotion of the health of himself and his family. Clinical medicine today is a science of cause and effect; diagnosis and treatment.

Because of the narrow aspect of each of these, the field of social medicine is evolving. "Social medicine considered as a practice or service embodies all those medical and social ideas, actions and responsibilities which help to promote community health and to prevent or relieve community disease, or to assess and alleviate individual sickness on the basis of social as well as medical enquiry. Social medicine considered as a scientific discipline is more correctly subdivided into social pathology and hygieology. These sciences, employing the methods of statistical and field epidemiology, and environmental, sociomedical and somatometric surveys, are concerned with human experience in relation to its changing opportunities and hazards."

The author feels that social medicine cannot be absorbed in the curriculum of our present educational course, which is limited by being based on clinical medicine and strives to teach cause and effect. Therefore a few institutions in this country should set up a curriculum of social medicine. This would include most of what is taught today, plus those subjects that would allow the physician to diagnose, treat and to help the individual to achieve the best that he is capable of in his life experence. In these centers research in social medicine could be carried out in conjunction with the centers in England that are devoted to this field.
S. H.

THE CONCEPT OF SCHIZOPHRENIA by W. F. McAuley, M.D., Belf., D.P.M., R.C.P.S.I., Principal Psychiatric Registrar, Downshire Hospital, Northern Ireland; with a foreword by John H. Ewen, F.R.C.P., D.P.M., Formerly Physician and Lecturer in Psychological Medicine at the Westminister Hospital. Philosophical Library, New York. 1954. Price $3.75.

This is a sketchy treatment of a big subject. The book does have the merit of being comprehensive in perspective in contrast to many books in this field which cling to one viewpoint alone. With its merits it is too bad this book is not more full. L. B. A.

FINANCIAL STATEMENT FOR 1954

LENNERTSON AND COMPANY
CERTIFIED PUBLIC ACCOUNTANTS

ROBERT A. LENNERTSON, C.P.A.
MEMBER—AMERICAN INSTITUTE OF ACCOUNTANTS

HOWARD E. SALOMO, C. P. A.
SAINT LOUIS 5, MISSOURI

January 27, 1955

Missouri State Medical Association,
634 North Grand Boulevard,
St. Louis, Mo.

Gentlemen:

The books and records of the Missouri State Medical Association for the year 1954 have been examined and a report is presented thereon together with the following attached statements:

Exhibit A Balance Sheet.
Exhibit B Income Statement.
Exhibit C Statement of Committee and Meeting Expenses.
Exhibit D Dues Receivable and Membership by Counties.

In connection with the statements, it should be noted that members' dues are taken into income on the cash basis when received; whereas the other accounts are maintained on the accrual basis. Items paid in advance are shown as prepaid and carried forward to the year to which they apply.

Scope of Examination

The Balance Sheet at December 31, 1954 and the Income Statement for the year ended with that date were reviewed. Examinations or tests were made of the accounting records, in the manner and to the extent deemed appropriate, without making a detailed audit of the transactions.

Cash in banks, as shown by the book accounts, was reconciled with the regular monthly bank statements and confirmations received from the depositaries. The petty cash fund of $25.00 and United States Savings Bonds with a par value of $55,000.00, were verified by physical inspection. Bond interest of $1,375.00 was properly accounted for on the books. Recorded cash receipts for the year were traced in total into the bank accounts as deposits, and disbursements for the period were substantiated by an inspection of paid checks, purchase invoices and other data on file. Selective tests were made of the income and expense accounts for the period. It was noted that JOURNAL space was contributed for advertising United States Bonds and small classified ads for members and the widows of members.

Income Statement

The financial result of the activities of the Association for the year 1954 was an excess of expenses over income in the amount of $609.83 as set forth in Exhibit B. The expenses include items paid in connection with the $5,000.00 expense budget for the year 1954 of the Community Health League of Missouri, assumed by the Missouri State Medical Association. The League has ceased active work.

Balance Sheet

The financial position of the Association at December 31, 1954 is presented in Exhibit A, and comments follow on certain Balance Sheet items.

Accounts Receivable—Advertisers, in the amount of $1,484.55, represent current accounts which were collected in full in January 1955. Accounts, totalling $307.85, were charged off as uncollectible during the year.

Unpaid Dues of $2,175.00, offset by a reserve account in like amount, represent 1954 dues of delinquent members carried at December 31, 1954 at the request of the local societies. Other members, with delinquent dues at the end of the year, were dropped from membership in accordance with the by-laws. Exhibit D presents a summary of unpaid 1954 dues, prepaid 1955 dues and membership by counties, as shown by the records of the Association.

Furniture and Fixtures continue to be stated in the fixed amount of $1,000.00. Purchases and repairs during the year have been charged to expense in lieu of depreciation.

Records and data on file were carefully reviewed for liabilities at December 31, 1954 and it is believed that all current liabilities of substantial amount are included in the Balance Sheet. A contingent liability of $900.00 is reported in connection with three malpractice suits pending against members. The Association is required to furnish assistance in an amount not to exceed $300.00 in each case, under the provisions of its by-laws.

Advance payments of $2,235.00 were made by exhibitors during 1954 for exhibit space for the 1955 annual session. These payments will be taken into income when earned in 1955.

General

The following insurance was in force at the close of the year:

Insurance on	*Type of Coverage*	*Amount*
Furniture and Fixtures	Fire and Extended Coverage (80 per cent co-ins.)	$3,000.00
Employees	Workmen's Compensation	Statutory
Lessee's Liability	Bodily Injury	$25,000/50,000.00
Treasurer	Fidelity Bond	20,000.00
Executive Secretary	Fidelity Bond	1,000.00
Employees (Executive Secretary, Field Secretary, and Business Manager)	Endowment Life Policies with Disability Benefits (Cash Value $11,720.76) 3 policies—coverage each	12,000.00
Automobiles of Executive Secretary and Field Secretary	Non-ownership—Bodily Injury	$50,000/100,000.00
	Property Damage	5,000.00

Subject to the foregoing comments, the attached financial statements, in our opinion, present fairly the position of the Missouri State Medical Association at December 31, 1954 and the results of its activities for the year then ended, in accordance with accepted principles of accounting applied on a basis consistent with that of the preceding year.

Yours very truly,
LENNERTSON & COMPANY,
Certified Public Accountants.

EXHIBIT A

Missouri State Medical Association
Balance Sheet, December 31, 1954

Assets

Cash:		
Mercantile Trust Company (Treasurer's Account)	$24,296.08	
Mercantile-Commerce National Bank (Secretary's Account)	430.47	
Petty Cash Fund	25.00	$24,751.55
U. S. Savings Bonds—Series G 2½% Cost and Par Value (Maturing 1955—$5,000; 1957—$15,000; 1958—$25,000; 1959—$10,000)		55,000.00
Accounts Receivable—Advertisers		1,484.55
Dues Receivable—Exhibit D		2,175.00
Furniture and Fixtures (at stated value)		1,000.00
Advances for Travel Expenses		59.34
		$84,470.44

Liabilities

Accounts Payable:		
Supplies and Expenses	$ 1,788.34	
Payroll Taxes	708.82	$ 2,497.16
Deferred Credit to Income:		
Advance Payments by Exhibitors		2,235.00
Contingent Liability to Members on Three Malpractice Suits—$900.00		
Reserve for Uncollected Dues		2,175.00
Reserve for Future Activities:		
Balance January 1, 1954	$78,173.11	
Excess of Expenses over Income for the year 1954 (Exhibit B)	(609.83)	77,563.28
		$84,470.44

EXHIBIT B

Missouri State Medical Association
Income Statement for the Year 1954

Particulars	General Activities	JOURNAL Publication	Total
INCOME			
Dues Received (includes $1.00 per member annually for The JOURNAL)	$70,480.00	$ 3,065.00	$ 73,545.00
Rentals—Annual Session Exhibit space	8,700.00		8,700.00
Subscriptions to The JOURNAL Non-members		212.90	212.90
Advertising		28,129.20	28,129.20
Interest on U. S. Savings Bonds	1,375.00		1,375.00
Collection Fees on A.M.A. Dues	690.83		690.83
Total Income	$81,245.83	$31,407.10	$112,652.93
EXPENSES			
Salary—Executive Secretary	$ 7,600.00	$ 3,800.00	$ 11,400.00
Salary—Treasurer	1.00		1.00
Office Salaries	17,899.95	8,949.97	26,849.92
Employees' Retirement Insurance Premiums	2,607.00		2,607.00
Office Rent and Light	2,784.97		2,784.97

Postage	1,986.67	718.87	2,705.54
Stationery, Printing and Office Supplies	1,861.61		1,861,61
Directories and Clipping Service	338.40		338.40
JOURNAL Expense—Paper, Printing, etc.		23,525.41	23,525.41
Cash Discounts to Advertisers		19.67	19.67
Commissions on JOURNAL Advertising		2,623.39	2,623.39
Discounts to Exhibitors	15.00		15.00
Telephone and Telegraph	1,562.87		1,562.87
Insurance—General	159.77		159.77
Fees, Subscriptions and General Expense	996.15		996.15
Taxes—Payroll and Personal Property	446.15		446.15
Traveling Expense—Executive Secretary	1,247.61		1,247.61
Traveling Expense—Field Secretary	2,757.71		2,757.71
Equipment Purchases and Repairs in lieu of depreciation	292.93		292.93
Legal Expense	4,506.27		4,506.27
Bad Debts		307.85	307.85
Committee and Meeting Expenses (Exhibit C)	26,253.54		26,253.54
Total Expenses	$73,317.60	$39,945.16	$113,262.76
Net Income or (Loss) for the Year	$ 7,928.23	$(8,538.06)	$ (609.83)

EXHIBIT C

Missouri State Medical Association
Statement of Committee and Meeting Expenses
For the Year 1954

Annual Session		$ 8,650.53
Council Meetings and Councilors' Expenses		4,317.93
Delegates to A.M.A.		2,655.90
Public Relations		6,245.73
Woman's Auxiliary		958.25
Committees:		
Emergency Medical Service	$ 32.19	
Conservation of Eyesight	110.62	
Rural Medicine	250.29	
Health and Public Instruction	1,012.02	
Public Policy and Relations	474.05	
Scientific and Post-graduate Work	394.62	
Hospital and Professional Relations	200.00	
Tuberculosis	24.60	
Infant Care	52.34	
Maternal Welfare	59.14	
Alcoholism	181.47	
Cardiac Disease	137.94	
Diabetes	28.91	
Industrial Health	45.07	
American Medical Education Foundation	35.19	
Medical Economics	59.14	
Medical Education and Hospitals	75.41	
Veterans' Care	252.20	3,425.20
		$26,253.54

EXHIBIT D

Missouri State Medical Association
Dues Receivable and Membership by Counties
December 31, 1954

	Membership					
Counties	Total	Junior	Active	Honor	Unpaid Dues	Prepaid Dues
Andrew	6	1	4	1		
Audrain	17	2	13	2		
Barton-Dade	9		7	2		$ 175.00
Benton	4	1	1	2		25.00
Boone	57	1	51	5		
Buchanan	96	4	73	19		
Butler-Ripley-Wayne	30	4	25	1		
Callaway	19		13	6		
Camden	1		1			
Cape Girardeau	45	2	37	6	$ 50.00	
Carter-Shannon	3		2	1		25.00
Chariton-Macon-Monroe-Randolph	32	1	26	5		
Clay	39	3	35	1	25.00	100.00
Clinton	7	1	5	1		87.50
Cole	40		37	3		
Cooper	13		12	1	25.00	
Dallas-Hickory-Polk	9		8	1		175.00
Dunklin	24	2	19	3		(412.50 (12.50N
Franklin-Gasconade-Warren	31	4	24	3		
Grand River (Caldwell-Carroll-Livingston-Grundy-Daviess-Harrison-Linn-Mercer-DeKalb)	61	5	44	12		
Greene	136	7	118	11		25.00
Henry	14	1	12	1		287.50
Holt	4	1	3			
Howard	7	1	6			
Jackson	735	51	592	92	600.00	
Jasper	77	2	59	16	25.00	
Jefferson	15		14	1		
Johnson	11	2	8	1	50.00	
Laclede	13		12	1		
Lafayette-Ray	29	5	19	5		
Lewis-Clark-Scotland	4		4			100.00
Lincoln-St. Charles	26	3	22	1	75.00	
Marion-Ralls-Shelby	29		24	5		
Miller	3		3			75.00
Mineral Area (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)	30	1	24	5		
Moniteau	6	1	5		25.00	112.50
Montgomery	4		3	1		75.00
Morgan	5		5			
Nodaway-Atchison-Gentry-Worth	21	3	16	2	25.00	
North Central (Adair-Schuyler-Knox-Sullivan-Putnam)	18		8	10		
Ozarks (Barry-Lawrence-Stone-Christian-Taney-Newton)	47	2	38	7		
Pemiscot	22	5	13	4	37.50	
Perry	12		9	3		(200.00 (25.00N
Pettis	30	3	22	5		
Phelps-Crawford-Dent-Pulaski-Maries	29	4	24	1		
Pike	12	1	7	4		
Platte	7	1	6			
St. Louis City	1,304	131	1,065	108	1,037.50	375.00N
St. Louis County	343	12	310	21	150.00	(75.00 (125.00N
Saline	24	3	18	3		
Semo (Stoddard-New Madrid-Mississippi-Scott)	39	1	29	9	50.00	
South Central (Howell-Oregon-Texas-Wright-Douglas-Ozark)	25	4	16	5		(87.50 (12.50N
Webster	3	1	1	1		50.00
West Central (Bates-Cass-Cedar-St. Clair-Vernon)	45	7	31	7		(325.00 (25.00N
Totals	3,672	284	2,983	405	$2,175.00A	$2,987.50

(A) Delinquent dues of members carried at December 31, 1954 at the request of local societies.

(N) New Members—payments received from applicants in 1954 for membership effective January 1, 1955.

Budget for 1955

Salaries	$40,500.00
JOURNAL Expense	28,500.00
Postage, Printing and Stationery	5,000.00
Travel: Executive Secretary	1,300.00
Travel: Field Secretary	2,800.00
Telephone and Telegraph	1,600.00
Office Rent and Light	3,000.00
Meetings, Committee Expenses	20,800.00
Defense	500.00
Scientific and Postgraduate Work	1,000.00
Woman's Auxiliary	1,200.00
Public Relations	7,500.00
Insurance Annuity	2,780.00
Miscellaneous General Expense	2,500.00
Furniture and Fixtures	1,000.00
Social Security Tax	500.00
Legal Expense	2,000.00
Total	$122,480.00

County Society Honor Roll 1955

(Societies which have paid dues for all members and date placed on Honor Roll)

Miller County Medical Society—November 24, 1954

Benton County Medical Society—December 1, 1954

Montgomery County Medical Society—December 8, 1954

Webster County Medical Society—December 10, 1954

Lewis-Clark-Scotland County Medical Society—December 15, 1954

Barton-Dade County Medical Society—December 28, 1954

Dallas-Hickory-Polk County Medical Society—December 29, 1954

Camden County Medical Society—January 3, 1955

Marion-Ralls-Shelby County Medical Society—January 11, 1955

Clinton County Medical Society—January 11, 1955

Howard County Medical Society—January 17, 1955

Carter-Shannon County Medical Society—January 22, 1955

Johnson County Medical Society—February 2, 1955

Editorials

(Continued from page 215)

This movement began in the East and is now sweeping through the Middle West. Its partial success has been due largely to the indifference and inertia of the remainder of the medical profession.

Shall we remain indifferent and allow this minority group to lead us on to regimentation and socialization? Or shall we organize "Organized Medicine" so as to include the welfare of its own membership with the rest of mankind of which it has been guardian throughout the ages?

MARTYN SCHATTYN, M.D.

Foot-so-Port Shoe Construction and its Relation to Center Line of Body Weight

1. The highest percent of sizes in the shoe business are sold in Foot-so-Port shoes to the big men and women who have found that Foot-so-Port construction is the strongest, because . . . .
- The patented arch support construction is guaranteed not to break down.
- Special heels are longer than most anatomic heels and maintain the appearance of normal shoes.
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2. Foot-so-Port lasts were designed and the shoe construction engineered with the assistance of many top orthopedic doctors. We invite the members of the medical profession to wear a pair — prove to yourself these statements.

3. We make more pairs of custom shoes for polio feet and all types of abnormal feet than any other manufacturer.

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BERNARD NURSING HOME accepts patients who are chronically ill, aged or invalided, and convalescents, whose primary need is good nursing care. Our staff is open to all accredited physicians. Facilities are available for low voltage muscular and nerve stimulation in paralytics, chronic arthritics, etc. Our home is beautifully furnished, centrally located, equipped with automatic sprinkler system, and is adequately staffed. Address 4385 Maryland, St. Louis 8, Mo., Telephone Jefferson 5-9290.

HAMILTON MEDICAL CONVALESCENT CENTER is now open for the care of the chronically ill, the convalescent, the aged or those needing terminal care. Four story building completely fireproofed by new automatic sprinkler system, newly decorated and refurnished with Simmons Hospital furniture. Pleasant and cheerful. Registered nurses on duty twenty-four hours daily. Occupational Therapist in attendance. Dining and recreational rooms on each floor.

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Hyoscine hydrobromide	0.0065 mg.
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MISSOURI MEDICINE

The Journal of the Missouri State Medical Association

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Halftones and zinc etchings will be furnished by The Journal when satisfactory photographs or drawings are supplied by the author. Each illustration, table or chart should bear the author's name on the back. Photographs should be clear and trimmed so that only the pertinent part is submitted. Drawings should be made in India ink on white paper. Used illustrations are returned to author after publication only when requested.

Cook County Graduate School of Medicine

INTENSIVE POSTGRADUATE COURSES

Starting Dates, Spring 1955

- **SURGERY**—Surgical Technic, Two Weeks, April 4, April 18
  - Surgical Technic, Surgical Anatomy & Clinical Surgery, Four Weeks, June 6
  - Surgical Anatomy & Clinical Surgery, Two Weeks, March 21
  - Surgery of Colon & Rectum, One Week, April 11
  - Basic Principles in General Surgery, Two Weeks, March 28
  - General Surgery, Two Weeks, April 25; One Week, May 23
  - Gallbladder Surgery, Ten Hours, April 11
  - Fractures & Traumatic Surgery, Two Weeks, June 13
- **GYNECOLOGY**—Office & Operative Gynecology, Two Weeks, April 18
  - Vaginal Approach to Pelvic Surgery, One Week, May 2
- **OBSTETRICS**—General & Surgical Obstetrics, Two Weeks, March 28
- **MEDICINE**—Two-Week Course, May 2
  - Electrocardiography & Heart Disease, Two Weeks, July 11
  - Gastroenterology, Two Weeks, May 16
  - Dermatology, Two Weeks, May 9
  - Hematology, One Week, June 13
- **RADIOLOGY**—Diagnostic Course, Two Weeks, May 2
  - Clinical Uses of Radio Isotopes, Two Weeks, May 2
  - Radium Therapy, One Week, May 23
- **PEDIATRICS**—Intensive Course, Two Weeks, April 4
  - Clinical Course, Two Weeks, by appointment
  - Cerebral Palsy, Two Weeks, June 20
- **UROLOGY**—Two-Week Urology Course, April 18
  - Ten-Day Practical Course in Cystoscopy every two weeks

Teaching Faculty—Attending Staff of Cook Co. Hospital

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Curiosa et Trivia

William B. McCunniff, M.D.

Sultan Mustapha III was the father of 582 sons and no daughters.

The first successful appendectomy was performed the evening of May 8, 1886, at Roosevelt Hospital in New York City. The patient was a 17 year old Irish boy, known to have had a right inguinal hernia which previously had been reducible. He was taken to surgery for strangulated hernia; the cecum was at the internal ring and a ruptured appendix at the bottom of the sac. After ligation and removal of the appendix, the wound was drained, the sutures removed in seven days, and the patient dismissed in good condition.

Baron Henri de Rothschild, well known for his dramatic writing (under the name of Andre Pascal), his philanthropies, and as a financier, was a doctor of medicine.

Try the drugstore first . . . this note received by a pharmacist: "Could you get me some kind of treatment for my blood cyrgulation I have verticle vains broken vains which some of them are draining already."

Capsule Clinics

Irving A. Wien, M.D.

- It has been felt that the essential precipitating factor in causing acute hemorrhagic pancreatitis is the escape of pancreatic juice sufficiently rich in trypsin from the ducts or acini of the pancreas into the interstitial tissues where the activated trypsin can act upon and erode pancreatic blood vessels. MacKensie, W. C.: Bull. Am. Coll. Surg. **40** (Jan.-Feb.) 1955.
- During the treatment of acute pancreatitis, it is obvious that it would be far more serious to overlook a perforated or gangrenous viscus than to perform laparotomy in a case of acute pancreatitis. MacKensie, W. C.: Bull. Am. Coll. Surg. **40** (Jan.-Feb.) 1955.
- Factors important in improving operability of a patient are: improved knowledge of surgical physiology, better pre- and postoperative care, and the use of antibiotics. Cole, W. H.: Bull. Am. Coll. Surg. **40** (Jan.-Feb.) 1955.
- Three basic methods are employed for the cultivation of cells in vitro. These are the hanging drop method, the roller tube technique, and the flask method of culture. Cancer Bull. (July-August) 1954.
- Biopsy of an adenoma of the rectum is to be condemned. The lesion removed in the initial and definitive treatment is the biopsy material. Morton, P. C.: Surg. Clin. N. America 34 (April) 1954.
- The time to repair hernias is when they first occur, and any delay, with or without a truss, works an injury and disservice to the patient. Zimmerman, L. M.: Surg. Clin. N. America **32** (Feb.) 1952.
- Tubadil (d-tubocurarine chloride) offers certain advantages in the postoperative care of hemorrhoidectomy patients and the drug is worthy of further study in other types of surgery. It relaxes striated muscle. Malia, E. R., et al.: J.A.M.A. **156** (Sept.) 1954.
- Factors that influence the prognosis in myocardial infarctions are: old age, previous myocardial infarction, intractable pain in the acute phase, shock, congestive heart failure, fever and leucocytosis, cardiac arrhythmias, and embolization. Russek, H. I., and Zohman, B. L.: J.A.M.A. **156** (Oct.) 1954.
- In the diagnosis of intestinal obstruction, the greatest single aid from the laboratory will come through the proper interpretation of a so-called "scout" X-ray film of the abdomen. Mason, R. L., and Zintel, H. A.: Preoperative and Postoperative Treatment, 2nd Ed., W. B. Saunders Co., Philadelphia, 1947.
- For practical purposes, a patient is considered anuric when the output of urine falls below 100 cc. in twenty-four hours. Ewell, G. H.: J. Internat. Coll. Surg. **22** (Oct.) 1954.

Entered as second-class matter, February 18, 1925, at the post office at Fulton, Missouri, under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917. Publication Office: 1201-5 Bluff Street, Fulton, Missouri. Editorial Office: 634 N. Grand Ave., St. Louis 3, Mo. Subscription Price: $3.00 Per Year. Printed by The Ovid Bell Press, Inc., Fulton, Missouri.

Missouri Academy of General Practice

KENNETH GLOVER, M.D.

Personality of the Month

Because of the illness of his wife, our recently elected president, Dr. Joseph Gettleson, of Kansas City, Missouri, chose to resign from this office. At a recent meeting of the Board of Directors in Jefferson City, the Vice President, Dr. George H. Wood, of Carthage, was recognized as acting president. Dr. Wood was born November 14, 1899, in Jasper County. He was graduated from high school in Jasper, obtained his premedical work at the University of Missouri and was graduated from Washington University at St. Louis with a M.D. degree in 1928. He served one and one half years of rotating internship and one year of residency at St. Lukes Hospital in St. Louis. He did graduate work at Tulane University in 1935. He served in the army of the United States for three years and was separated in 1936 with the rank of major. He has been in general practice at Carthage for twenty-four years.

Dr. Wood has been on the staff at McCune-Brooks Hospital in Carthage and is past president of Jasper County Medical Society. His civic responsibilities have included the Masonic organization, Rotary club, Board of Education of Carthage Public Schools, member of Jasper County Association for Social Service, member Carthage Chapter of Missouri Society for Crippled Children and Adults, and Medical Director of this district to State Board of Directors American Cancer Society, Missouri Division. He is the father of two children, a daughter and grandson, and a son, a premedical student at Central College at Fayette.

We feel that Dr. Wood is well qualified to fill this vacancy and knowing personally of his medical and civic responsibilities and the care with which he assumes and disposes of responsibilities, we feel he will direct the Academy well during this year.

To those General Practitioners who have not yet joined our Missouri Academy, may I urge you to write to Dr. Pete Siegel at Smithton, Missouri, for application blanks and other information you may desire?

Crossroads Comment

PETER V. SIEGEL, M.D.

Dear Aunt Helen:

The other night I happened to be leafing through the kids book of knowledge and I came across Greek Mythology. As I read along I was sort of impressed by some of the stories and ended up by concluding that maybe they aint so mystical after all. Didn't take much thinking to draw some interesting parallels with what is happening nowdays.

A for instance. Remember the one about Achilles. It didn't make so much of an impression on me years ago when I first read it but made quite a dent the other night. Anyway his Momma, Thetis, to stay a jump ahead of the fates who reckoned that Achilles would die in his prime, dunked him in the river Styx. Only his heel by which she held him was untouched by the black water. This was the only part of him that could be wounded. Sure enough he went through many a scrap with nary a scratch. But one time he got caught with his britches up. As he was getting ready for his wedding, I suppose he was going to settle down to a long happy married life, Paris snuk up and got him in the heel with a poison arrow.

Here in Missouri for a long time the profession had been sort of married to itself. And for a long time we couldn't be hurt because we had, by tradition, sort of been sprinkled by that magic water. For a long time we had some heels in our midst but the public couldn't see them. Then all of a sudden we started getting picked on and it begin to hurt. Yep, in spots our pants fell down and the heels started showing.

In spite of these heels we have had some good progressive leadership and have gone a long way in not only covering up our past mistakes but are trying to really do some good in the future. Like the single licensure law. But wouldn't you know that some in our group just can't see any further ahead or away from their own practice, and regardless of the fact that it was approved by our governing body still openly fight it. One of them does more harm than a hundred others can undo.

Maybe Sir William could live each day as it came but in this age things just move too fast. Don't want anyone to ever accuse me of being myopic.

Your country nephew,
PETE

HydroCortone®

(HYDROCORTISONE, MERCK)

In rheumatic fever early therapy may prevent residual cardiac damage[1]

MAJOR ADVANTAGES: Intense anti-inflammatory action. Prompt suppression of symptoms. Lifesaving therapy in some instances.

Most clinicians agree that HYDROCORTONE like cortisone produces prompt suppression of the extra cardiac manifestations of rheumatic fever. Agreement is also general that adequate hormonal therapy favorably influences pericarditis, prolonged PR interval and congestive failure (when sodium intake is restricted). While less unequivocal there is considerable evidence that adrenocortical therapy also suppresses tachycardia, gallop rhythm and overactivity.[2]

The main point in question remains the ability of HYDROCORTONE or CORTONE to prevent valvulitis. On this score, Kroop[1] in a recent study of 56 patients with rheumatic fever concludes "A two-year follow-up of patients who had sustained initial attacks of carditis indicates that early treatment with large doses may prevent residual cardiac damage." This conclusion is further supported by a recent review[3] which states ". . . many of the reported poor responses of rheumatic fever to treatment occurred in cases in which either very small doses of the hormones were used or treatment was continued for only a short period of time."

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REFERENCES: 1. Kroop, I. G., *N. Y. State J. Med.* **54**:2699, Oct. 1, 1954. 2. Heffer, E. T. *et al.*, *J. Pediatrics* **44**:630, June 1954. 3. Massell, B. F., *New England J. Med.* **251**:263, Aug. 12, 1954.

Woman's Auxiliary

Mrs. W. E. Martin, *President*

Some of us are wives of specialists, some are wives of general practitioners, some of health officers, some of retired medical men, or perhaps army officers. Some of us live in small towns and some in cities. But no matter where we live or in what capacity, we are all doctors' wives, and wives of public servants.

Whether we are retiring and home-loving, or club-minded and extroverts, we are still judged and observed on the basis of being our husbands' wives. We must consider ourselves, then, in relation to our husbands' profession rather than just as anybody's wife. We must be careful of our attitudes toward patients and non-patients, others in the profession, and other doctors' wives. We, as members of the medical Auxiliary want to help the doctors as a whole, or else we have no excuse for being organized.

Mrs. George Turner, our A.M.A. Auxiliary president, who will be present at our Annual Meeting in March, has told us that as doctors' wives we live under the same code of ethics as our doctor husbands. When a woman marries she accepts the responsibility as a leader in preventive community health. She is a part of the medical group, but lives as a layman. By personal participation in community service programs, she demonstrates interest in the welfare of people in terms easily understood by everyone in her own home town.

Elmer Hess, M.D., our A.M.A. President-elect, and also a Missouri convention visitor, has written a guest editorial in Missouri Medicine, "Ethics is very simple, 'The Golden Rule.' As a man is in his heart, so is he. The backbone of medical ethics is 'Service to Humanity, Period.' "

May we, as Auxiliary members, be willing to accept this code of ethics and live our convictions, which is the best way to show the non-medical public, that our doctors are always striving to maintain the best relations and give the best service possible, to ailing clientele. Right attitudes and activities will inspire other people to follow, and make for better medical public relations.

Pettis County Pot Pourri

C. Gordon Stauffacher, M.D.

A young lady came into the x-ray department of our local hospital to have her chest x-rayed. It was evident to the technician that this was her first time to undergo such a procedure. After her chest was x-rayed, she turned to the technician and asked, "Can you tell me how much this x-ray shows?" "Of course," replied the technician, "It shows your heart and your lungs, your ribs and it even shows your diaphragm." "Gosh," gasped the woman, "Does it show that far down?"

Recently I was asked over the phone if I was a doctor who practiced geology and obstetrics.

One of my OB patients who suffers from pytalism says she is "an epectorant mother."

A woman came to my office complaining of general malaise. She said she had been taking vitamins but they made her feel worse rather than better. I asked her what kind of vitamins she had been taking. She drew a bottle out of her purse and handed them to me. The label stated that the contents were plant vitamins and that the pills in each bottle were equivalent to one half ton of fertilizer.

If a man still has his appendix and his tonsils the chances are he is a doctor.

The other day a patient I had not seen for several years came into my office. As she was about to leave, I asked her about her daughter, Sally, whom I had delivered in 1948.

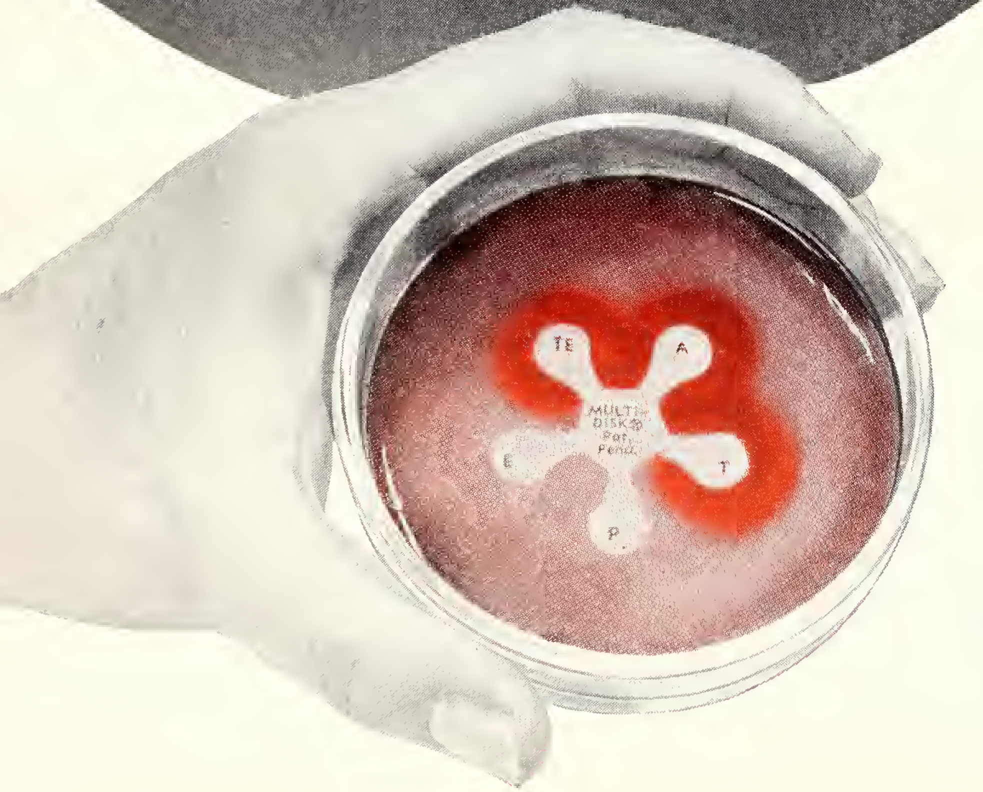
"Oh Sally is going to school now," she replied. "That was seven years ago that she was born. I suppose you think it strange that we haven't paid you yet. But, don't worry, Doctor, we'll get around to it one of these days."

"Take your time," I replied, "it's nice to know that there'll be something coming in."

Against common intestinal flora

This sensitivity test shows ERYTHROCIN and the same antibiotics against a typical intestinal strain of *E. coli.* Note that ERYTHROCIN and penicillin do not affect growth of this organism—while the other antibiotics show marked inhibitory action. Since ERYTHROCIN is inactive against gram-negative organisms, *it is less likely to cause alteration in common intestinal flora—with an accompanying low incidence of side effects.*

...with little risk of serious side effects



The main reason is because ERYTHROCIN acts specifically. It destroys only harmful coccic invaders—yet doesn't materially change normal intestinal flora. *Thus, your patients rarely get side effects from* ERYTHROCIN. Nor do they get the allergic reactions sometimes seen with penicillin therapy. *Filmtab* ERYTHROCIN (100 and 200 mg.) comes in bottles of 25 and 100. Won't you prescribe *Filmtab* ERYTHROCIN—soon? Abbott

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Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

The April, 1915, edition of the *State Bulletin* features the eulogies in memory of Dr. Washington Emil Fischel. He filled a prominent place in the history of the St. Louis Medical College and the Washington University Medical School. In 1886 he was made professor of clinical medicine, which position, with occasional change of title, he held for twenty-eight years.

The Medical Fund Society was incorporated in 1872. He was secretary of this society from 1886 to 1912, and its president from 1912 till his death. At that time practically all medical schools were proprietary enterprises, without university connection and under complete control of their respective faculties. The cost of conducting such a school, there being no salaried teachers and no laboratories or hospital to maintain, was relatively small, and each year the net profits were divided among the faculty members.

By the pecuniary sacrifice of its members the society was enabled to acquire first the property at Seventh and Myrtle streets, and later to erect the building on Locust and Eighteenth streets, so long occupied by the medical school and now being given up for the new buildings provided by the university for its medical department. In 1912 the Medical Fund Society transferred this Locust Street property to the Washington University and the latter assumed its bonded indebtedness.

Abraham Jacobi, M.D., LL.D., said in his address: "Dr. Fischel knew the medical schools of this country when the curriculum extended over two short seasons only. The didactic lectures of one year were repeated the next; bedside instruction, there was none; a few sick were presented in a weekly hour to students gathering in the amphitheater.

"Eighty years ago it was ascertained that of thirty-five sick thirty-four would die, while at the present time the same number will recover. Pasteur and Lister stopped that misery."

TWENTY-FIVE YEARS AGO

Sir Wilfred Grenfell went to Labrador in 1892. He built up one of the most unique medical practices of today. As a physician, surgeon, and magistrate, Sir Wilfred performs surgical operations, marriage ceremonies, and settles disputes among the inhabitants. His work is made possible by his hospital ship, Strathcona, in which he cruises along the 1500 mile coast line during the openwater season, ministering to his patients.

Sir Wilfred is now in this country giving lectures on Labrador as a means of raising revenue for his work.

Dr. L. Abraham Shafer, the dean of medicine in Platte County is dead. He was stricken Christmas morning at the age of 81 years. He was president for five years of the Platte County Medical Society.

The Missouri Supreme Court, in an opinion handed down March 4, sustained the action of the State Board of Health in revoking the license of Dr. S. E. Ball, Excelsior Springs, for unprofessional conduct. Ball employed paid agents and runners to meet all trains entering Excelsior Springs to solicit patients for his institution, Ball Health Institute.

The magnificent new building of the Jefferson Medical College and Curtis Clinic, Philadelphia, was dedicated February 22, 1930.

Hospital Day will be observed again this year on May 12, celebrating the anniversary of the birthday of Florence Nightingale.

On the morning of January 8, 1930, there passed away Mrs. Frances Long Taylor, at Athens, Georgia, in the eighty-fifth year of her life. Mrs. Taylor was the second and favorite child of the twelve children of Dr. Crawford Williamson Long, who was the first man to use ether as an anesthetic.

TEN YEARS AGO

A new wing has been completed on the Louise G. Wallace Hospital, Lebanon, which makes the capacity of the hospital eighty beds.

Dr. A. R. McComas will be presented with a gold button commemorating his fiftieth anniversary as a Mason at Sturgeon on April 11.

Lt. Col. Durward G. Hall, Springfield, Director of the Military Personnel Division and Acting Chief of Personnel Service, Office of the Surgeon General, has been promoted to a Colonel.

Col. Curtis H. Lohr, St. Louis, is on a thirty day leave from his duties as head of the 70th General Hospital.

Two physicians, members of the House of Representatives of the Missouri State Legislature, Dr. James A. Gray of Atchison County, and Dr. A. F. Wagner of Wayne County, have introduced House Bill 206. This bill, which has been introduced in the last two sessions of the legislature, is commonly known as the "Doctor or Medical Prefix Bill." It provides that all persons licensed to practice a healing art, who uses the prefix "Doctor," must affix thereto suitable words or letters designating the degree held by such person or the particular type of practice in which such person is engaged which designation shall represent the profession such person is legally authorized to practice.

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Each tablet contains:
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Progress Notes of Prepayment Plans

Blue Cross Moves Forward

To keep abreast with developments in medical care and to continue to provide the maximum in hospital benefits to Blue Cross members at the lowest possible cost, the Trustees of Group Hospital Service, Inc., have authorized an increase in Blue Cross benefits and an adjustment of dues effective May 1, 1955. Present benefits were reviewed and substantial increases will be made in those which will be of the greatest service to the greatest number of members.

Twenty-five years ago one could get the best hospital care available for about $24 a week, plus a few cents extra for drugs. Today, just one day's care can cost much more than that.

The advancement of medical science with its "miracle" drugs and methods, some of which were unheard of even five years ago, have brought about improvement in hospital care, shorter hospital stays, and return to work without excessive loss of earning days. But, doctors know that short hospital stays do not necessarily mean small bills. As often as not the big hospital bill is the result of the concentrated quality of care given to prevent complications, to deal quickly with the patient's problem, and get him well and on his feet in the shortest possible time.

Blue Cross is designed to relieve the average worker of the burden of hospital expense when illness strikes him or his family. To meet today's needs, Blue Cross is adding improved service benefits to provide members with the best hospital care that science can offer. Each illness or accident can require different care and treatment, and service benefits give patients more protection than a daily cash allowance. Limited dollars pay less and less of the hospital bill as charges for these services go up. The value of Blue Cross service benefits is their flexibility. Patients receive all of the certificate benefits needed in service hospitals—regardless of cost—rather than indemnity payments of a limited number of dollars toward the hospital bill.

In addition to the life-saving services Blue Cross members now receive such as oxygen, glucose, expensive drugs and antibiotics, operating room, meals and special diets, general nursing service and a two-bed room when available, after May 1, 1955, Blue Cross members will benefit from these even greater services: 70 days per admission (was 60 days per year); private room allowance up to $10.00 per day (was $6.00 per day); care beyond 70 days—180 days at up to $3.00 a day for everyone (was 180 days at $1.50 for subscribers and sponsored dependents only); out-patient care up to $25.00 per admission (was $15.00 per year); non-service hospital allowance up to $10.00 per day (was $7.00 per day); no contributory payment to hospitals (was $1.00 per day by all dependents—$2.00 in maternity cases); tuberculosis, mental, venereal, nervous, drug and alcoholic treatment in sanataria $14.00 per year (was $90 per year); no enrollment fee (was $1.00 per subscriber at time of enrollment), and unmarried children continued as dependents to age 19 (was age 18).

Hospital admissions not separated by 90 days will be considered one admission. Thus, if a patient enters the hospital on May 1, is discharged on May 10 and readmitted on July 1, this would be considered one admission and after the total 70 days full benefits had been used, the patient would be entitled to an allowance of $3.00 a day for an additional 180 days.

New scientific discoveries, plus ever changing methods of treatment, are also responsible for increased hospital costs, and all indications are that hospital costs will continue to increase as improved methods of treatment are developed. A nominal adjustment in dues has been authorized by the Board of Trustees of Group Hospital Service to provide these broader benefits.

Under the new program, the two person membership will become a family-type membership with family membership dues. A careful study has shown that members of two-person contracts have been receiving protection at less than cost. Many members with two-person memberships are older, requiring more hospital care than their dues will support. For a variety of reasons, childless couples require more hospital care than a mother and father, while the average cost of protecting children now is low, thanks to medicine's conquest of childhood diseases. Current utilization with regular two-person memberships indicates that Blue Cross is spending much more than it is taking in from these members to pay for hospital care alone. Although protecting considerably fewer people than family memberships, the two-person membership actually uses as many days of care per year as do the family memberships.

Blue Cross is a group hospital service plan to serve the needs of the majority of its members. Therefore it would be unfair for the dues from Family Memberships to continue to subsidize the care of members with two-person memberships. Blue Cross, a non-profit organization supplying hospital care for the people and sponsored by the hospitals and doctors, is obligated to provide the best hospital services for all of its members, rather than the proportionately few members covered by two person memberships. These two-person memberships will be transferred to family-type memberships.

In abolishing the two-person membership, the St. Louis Blue Cross Plan is actually bringing its program in line with the majority of Blue Cross Plans across the nation. At the present time, almost 60 per cent of all Blue Cross Plans have been forced to abandon the two-person membership.

Missouri Medicine

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Weed Dermatitis

Facts and Fallacies

WILFRED E. WOOLDRIDGE, M.D., *Springfield*

Weed dermatitis is a disease of outdoor people. It is a disease of great frequency and discomfort and is a curse to the unfortunate whose work or pleasure is so marred.

Since there are few plants which act as direct irritants, weed dermatitis becomes a problem of allergy. In this section of the country the mental picture which arises is that of contact dermatitis due to poison ivy. This explosive dermatitis is a type almost peculiar to itself and diagnosable, with practical certainty, from appearance alone.

Opposed to this acute disease is the chronic, erythematous, pruritic dermatitis caused by other weeds. The diagnosis of this latter type of contact allergy is often far from obvious and confirmation by careful history and by skin testing is usually necessary before any specific treatment can be undertaken.

GENERAL CONSIDERATIONS

It is fundamentally true that any weed is capable of causing an allergic eruption. However, in this region, the acute dermatitis is due in such proportion to the Rhus (poison ivy-oak-sumac) group that it has come to be regarded as the great offender. Likewise, the chronic eruptions may be caused by a great variety of plants, but relatively few cause most of the trouble.

In dealing with allergic dermatitis caused by weeds, one need be concerned with both direct and indirect contact with the plant. Usually the injury is sustained by bruising the plant upon the skin. However there are numerous instances, in the experience of those dealing daily with this problem, of patients contacting the poisonous oleoresin indirectly through house pets, farm animals, children's clothing, and automobiles.

The sticky, ether-soluble oleoresin found in plant juices, which is responsible for cutaneous sensitization, is not the same as the water soluble fraction responsible for causing hay fever.[1, 6] The skin principle occurs little, if at all, in pollens. For that reason, pollens seem not important as a cause of allergic dermatitis,[1] although there are some opinions to the contrary.[2]

ACUTE DERMATITIS

The acute weed dermatitis characterized by the poison ivy group eruptions generally has an incubation period of only a few hours. The swelling, vesiculation and itching are familiar. Confirmatory histories can usually be determined even in the cases of those indirectly exposed. Lines of vesicles suggest an intense reaction. Perhaps less familiar is the occurrence of distant patches of dermatitis a few days following the initial eruption. These represent an "id" or allergic reaction due to absorbed toxins, and are not caused by the transfer of blister fluid containing the allergenic substances, as has been erroneously believed.[3, 4]

To correct some further misimpressions, it has been well established that the allergenic substance of the Rhus group, whether from ivy, oak or sumac, is identical.[5]

Also the fact seems well established that smoke from burning Rhus plants is not allergenic.[6]

It is likewise important to know that poison ivy dermatitis may occur throughout the year. During the winter time one consistently sees this form of weed allergy occasioned by bruising the stems of the plant upon the skin, and these cases most often occur in hunters and farmers.

CHRONIC DERMATITIS

It is interesting that those who suffer from acute attacks of poison ivy dermatitis are usually sensitive to that plant alone. This is not the case with individuals developing chronic weed dermatitis.[1] Although short ragweed is the chief cause of

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Delivered before the Clinical Session of the American Medical Association, December 2, 1953, St. Louis.

chronic weed dermatitis,[7] other weeds may be involved and skin testing will often reveal a polyvalent sensitivity. Other weeds occasionally incriminated are giant ragweed (horse weed), bitterweed (dog fennel), burweed marsh elder and sneezeweed. These may be important as sole or accompanying offenders.

The typical eruption of chronic weed dermatitis begins in the early summer and gradually grows more severe as the weeds flourish. An important feature is the termination of the dermatitis with the first killing frost when the eruption has been present only for a season or two. With later seasons the eruption lasts longer into and, finally, through the winter. This may be accounted for by the patient's increasing sensitivity and continuing exposure to dusts in fields and barns which contain small amounts of weed particles.

The eruption, at its onset, involves the most exposed portions of the body with a patchy, erythematous, scaling, pruritic dermatitis. Only rarely are there vesicles. This dermatitis is subject to exacerbations with heavy exposures and by remissions with a few days respite from the offending surroundings. Each year the dermatitis grows more extensive and severe until a generalized dermatitis can result. In severe cases winter offers only a period of improvement with renewal of extreme symptoms the following spring.

PREVENTION

In both acute and chronic weed dermatitis, prevention, in so far as possible, is important. Obviously, prevention can be best exercised when the offending weeds are known. With that information at hand, the patient must be able to recognize the weeds at fault so that gross exposures can be avoided. If exposure does occur, prompt washing of involved skin with soap and water is probably the best prophylaxis. If ether or acetone are available, such cleansing of the skin is also effective.

Various protective applications have appeared over the years, but none have been entirely satisfactory. These function by covering the skin with a chemically inert, non-absorbing layer and apparently give some degree of protection when exposure is unavoidable.

Under the controlled and closely observed conditions of experimental study[8] the benefit of these creams has been somewhat greater than when used by patients. In general, the protective creams available to date have been disappointing, at least as far as their use in weed dermatitis is concerned.

HYPOSENSITIZATION

The course of an individual's sensitivity is unpredictable. Ordinarily, if considerable exposure to an offending substance occurs early in life, allergies will develop at that time. It is not unusual, however, to note the appearance of weed dermatitis following no unusually heavy exposure, and first appearing in middle age or later. This is particularly true when caused by weeds producing chronic eruptions. If a weed allergy of mild degree develops, avoidance of that weed is sometimes practical and satisfactory. Many times, however, it is neither practical nor satisfactory, particularly in those whose occupations necessitate further exposure. In such people an attempt at hyposensitization, sometimes less accurately termed desensitization, should be made.

Hyposensitization may be achieved by either the hypodermic or oral routes. By either method, hyposensitization is not without its reactions and should not be tried without the physician becoming thoroughly acquainted with the technic at hand.

For years there has been a running battle between the proponents of hyposensitization hypodermically and those favoring oral desensitization. Needless to say, no overwhelming superiority exists for either method, or the dispute would have been settled before now. Therefore, the views which I proclaim will be my own and based on experience gained in using both methods.

Generally I favor oral hyposensitization. I have found this type most satisfactory because it can be carried out over a prolonged period with gradually increasing doses of the extract and with administration by the patient.

Oral desensitization also saves the expense and inconvenience of frequent office visits. With explanations given to the patient, the matters of tolerance can be nicely adjusted. Admittedly, in some patients there are problems of gastrointestinal irritation and of anal pruritus caused by unabsorbed extract. However, these difficulties can usually be controlled and the results, in my opinion, are superior to those obtained hypodermically.

It is true that extracts given by injection enjoy the certainty of the entire dose being absorbed. A problem encountered, however, is that of giving the patient sufficient active material to hyposensitize him without causing prohibitive local reactions.

Whatever the method used, hyposensitization to the poison ivy-oak-sumac family is fraught with uncertainty. While good results may be obtained in some cases, I believe a satisfactory reduction in sensitivity to this group is much more difficult to attain than is the case with other plants.

It is also to be remembered that hyposensitization is not easily achieved. The patient would not have developed a weed dermatitis if he were not one who obviously possessed little immunity to a particular plant. Therefore, treatment aimed at stimulating an immunity is difficult and results will come about slowly. Oral hyposensitization must be carried out during at least two off-seasons before much immunity will be developed. Even then, the immunity developed will probably not protect against gross and careless exposure.

The duration of an immunity acquired through hyposensitization is also uncertain. In some patients it seems to be permanent. In others, short courses of off-season treatment are necessary; much in the nature of "booster shots."

Patients who have suffered from severe attacks of weed dermatitis, however, are more than happy to receive short booster courses of treatment in order to keep their immunity at a high level.

TREATMENT

A blanket statement as to treatment is impossible, for the treatment necessarily varies a great deal with the type, location and severity of a given eruption.

With any mild, localized and short lived eruption, such simple measures as bland antipruritic creams, lotions and compresses suffice. With eruptions of more extent and severity, whether acute or chronic, ACTH, cortisone or hydrocortisone, may greatly aid the patient. However, the prolonged and indiscriminate use of these dangerous medicines is to be discouraged.

My experience with zirconium preparations, as reported for the relief of Rhus eruptions,[9, 10] has been limited. Zirconium would have been more employed if I could have obtained results which warranted further use. As for oral antihistamine drugs, I find them of little use although in some patients they may lessen itching.

There is one point on which increasing agreement is noted. This is the inadvisability of treating established cases of poison ivy dermatitis with injections of poison ivy extracts. All have been confronted with patients demanding such injections and the temptation to satisfy them is great. The fact remains, however, that not one shred of objective evidence has supported such injections. Severe reactions have been reported[11, 12, 13] and are not rare (figs. 1 and 2).

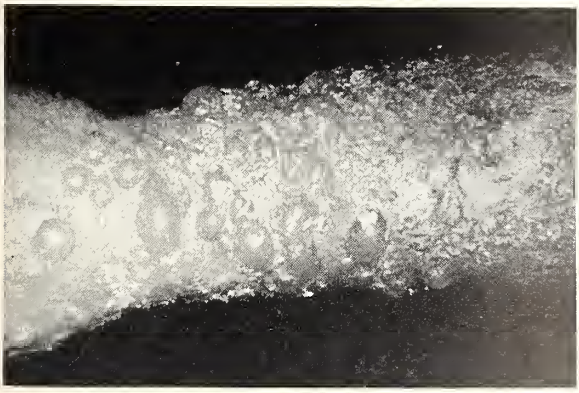

Fig. 1. Acute vesiculobullous eruption which appeared within twenty-four hours of receiving an injection of poison ivy extract. This injection was given as the patient was recovering from an attack of poison ivy dermatitis which involved the forearm and which was not severe. (Photograph prepared from a Kodachrome transparency.)

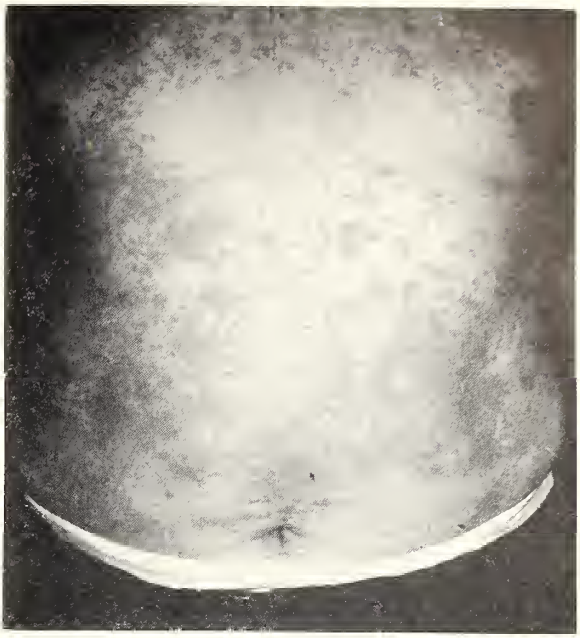

Fig. 2. The same patient as shown in figure 1. Simultaneously with the severe flare-up on the forearm a generalized, eczematous, pruritic dermatitis appeared. This area of the body was not involved in the initial attack. (Photograph prepared from a Kodachrome transparency.)

CONCLUSIONS

The problem of weed dermatitis may be simple, particularly in the acute disease. It may also be difficult to the extreme in chronic cases.

A reward awaits those who painstakingly investigate and treat patients who may be sorely incapacitated by weed dermatitis.

With the present day equipment for investigation and treatment, a satisfactory conclusion may be reached with almost every patient.

107 Professional Bldg.

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Balance Disturbance in Cerebral Palsy

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Standing balance is a prerequisite to independent walking. The causes of faulty balance in the cerebral palsied patient comprise several distinct factors. This paper discusses these factors and deals with the treatment related thereto.

The mechanisms in the production of faulty balance involved may be outlined as follows:

1. Fixed deformity
2. Functional deformity
3. Muscular weakness
4. Involuntary motion
    A. Overflow
    B. Athetosis
    C. Tremor
5. Ataxia
6. Apprehension
7. Marked mental retardation

The most common fixed deformity in cerebral palsy interfering with standing balance is equinus of the feet and ankles. Up to about twenty degrees of equinus can be compensated for by hyperextension of the knees and increased lumbar lordosis. Above twenty degrees the knees usually flex regardless of other muscle imbalance, and the increased foot-tibia angle permits balance only with ball of foot weight bearing and knee flexion. Associated with equinus may be either valgus or varus deformities of the feet. The correction of these may be undertaken with a single short upright outside or inside bar brace for night or day wear. The night braces are adjusted periodically by setting up with bending irons so that the equinus deformity is gradually stretched out. After the ankle reaches a right angle, the day brace can frequently be eliminated and only a day shoe with a varus or valgus sole and heel wedge used. The correction is brought to a maximum of overcorrection and maintained by the night brace. Physical therapy in the form of muscle strengthening exercises of the ankle dorsiflexors is carried out concomitant with the correction of the deformity in the effort to obtain balance between the crural and anticrural musculature. This approach gives better muscle balance than is obtained with a heel cord lengthening and eliminates the danger of calcaneus deformity which is so disabling.

Adequate follow-up of lengthened heel cords in cerebral palsy requires night bracing. The tendency of the deformity to recur after correction, barring gross overcorrection with calcaneus deformity, is remarkable. Not infrequently one sees heel cords that have been lengthened several times when adequate night splinting to counteract the tendency of the foot to fall into equinus during bed rest has not been carried out. Gravitational influences mitigate for correction of the equinus deformity during weight bearing, for the lever action of the foot puts a stretch on the heel cord. These factors speak for an attempt at correction and maintenance of correction of equinus deformities of the ankle by conservative means. With adequate attention to detail it is only rarely that operative intervention for heel cord tightness is called for.

The varus or valgus components may be approached by inverting or everting the single bar brace. Varus or valgus deformities of enough severity in older children (more than 10 and 12 years) may be corrected by a suitable triple arthrodesis of the foot. It is advisable to section the deforming invertor or evertor tendons, peroneals or tibials, at the time of the arthrodesis save that a tibialis anticus should be transplanted to the mid foot when the tendency to equinus is marked.

Calcaneus deformities of the feet may severely interfere with or even obviate balance. A double stop brace with the stop at ninety degrees and a full length sole plate stabilizes the defect and at the same time tends to thrust the tibia posteriorly and thus overcome the knee flexion that is so frequently also present. More permanent correction is difficult short of pan-astragaloid arthrodesis.

A moderate knee flexion deformity does not seriously interfere with balance. As a matter of fact, slight knee flexion enhances stability and this position is seemingly assumed by some cerebral palsied in order to compensate for a poorly responsive musculature, generally speaking.

The influences of weight bearing tend to flex the knees. Slight equinus deformities of the feet promote the lever action of the foot on the leg tending to extend the knee. This is so provided that most or all the tightness rests not in the gastrocnemius, but in the soleus, for the gastrocnemius acts as a knee flexor. Knee flexion deformity can be stretched out by braces. Quadriceps strengthening carried out during this corrective treatment promotes the establishment of muscle balance. Because of the adverse influence of gravity a few of these knees in the true spastic have been handled surgically. The procedure has been as follows:

1. In order to maintain the extensor power of the hip joint by the hamstrings on the hip joint the insertions of the semi-membranosus and semitendinosus are transferred to the lower end of the femur.
2. The capsule of the joint is divided.
3. The biceps tendon is lengthened.
4. The gracilis and sactorius are transected.

5. In marked equinus tendencies with tightness of the gastrocnemius wherein the gastrocnemius tends to flex the knee, both heads are transplanted from the femur to the upper tibia.

Complete extension is maintained by night bracing and quadriceps strengthening is carried out to restore active knee extension to one hundred eighty degrees.

Results from this procedure are too recent to evaluate. It has been found that complete knee extension can be obtained and maintained. Knee extension in the presence of hip flexion contractive accentuates hip flexion deformity. Hip flexion deformity in cerebral palsy is quite frequently associated with hip extensor and erector spinal weakness, which limits the patient's ability to compensate for a given amount of hip flexion deformity.

Hip flexion deformities are next to impossible to correct by conservative means and still difficult by operative means. As hips tend to flex, so do knees. The usual approach is bracing and stretching of knees and hips together with hip extensor and quadriceps strengthening exercise.

Adductor contractures interfere more with gait than with balance. Knees pressed together by tight and overactive adductors in the presence of markedly weak abductors may serve as a mechanism for maintaining lateral balance. Stretching of abductors with night braces and concomitant abductor strengthening, and day bracing with a pelvic band to prevent overpull of abductors is the usual approach to the problem. Adduction contracture of the hip is not infrequently the cause of subluxation or dislocation of the hip in the cerebral palsied individual. In the unilateral irretrievably dislocated hip the pelvis assumes a position of obliquity with consequent trunk list. The dislocation in itself does not prohibit an individual from walking, whether the individual be cerebral palsied or not. The deformity is one of severity.

Reduction and plaster immobilization in the quite young patients occasionally is effective, provided that the adductors are kept stretched by night bracing in the follow-up. Upper femoral osteotomy occasionally may be indicated from the mechanical standpoint in the irretrievably dislocated hip. It has been possible to reduce completely many of the subluxated hips by doing a thorough adductor section followed by night bracing in abduction. Some of those hips in which the acetabular roof is markedly oblique resubluxate when the femur is placed in the neutral position. It is hoped that with night bracing the acetabulum will gradually deepen to render the hip stable in the neutral position. That this will occur in the older cases seems doubtful. So far no shelf operations have been done.

Functional deformities are those which are not fixed but are due to muscle imbalance. Those functional deformities most common in the cerebral palsied are the extensor thrust, the adductor overpull and the knee flexion tendencies. Any mechanical correction of a given overactive muscle group must be accompanied by muscle strengthening of the comparatively weak antagonistic group in order to restore muscle balance. If the extensor thrust involves the back as well as the quadriceps and calf musculature a control brace with ankle, knee and hip stops and spring back uprights for day wear are used together with appropriate muscle re-education procedures. Plantar thrust in the feet can be overcome gradually by overcorrection in dorsiflexion by night braces, since overstretching tends to weaken any given muscle group. Adductor overpull is treated by night bracing in abduction using single short upright bar braces and a spreader bar together with abductor strengthening, and day bracing for a time if necessary. Hamstring overpull or knee flexion tendencies are treated with night bracing, quadriceps strengthening and day bracing at times. The influences of gravity are favorable to the maintenance of correction of equinus, but tend to promote recurrence of knee flexion deformities. Knee flexion tendencies in the true spastic more logically occasionally warrant operative interference of a type already described.

Muscle weakness as a factor in balance impairment in cerebral palsy is to be considered. Muscle groups or isolated muscles may be weak not only because of overpull by more powerful antagonists, but may be weak per se due to area four lesions. Marked muscle weakness is seen in all types of cerebral palsy. This weakness is treated with braces with appropriate stops until such time as the muscles are improved in function by muscle strengthening exercises to permit discarding of the braces. The strengthening process employs progressive heavy resistance exercises as well as confusion type exercise.

Involuntary motion as a cause of loss of balance is well known. This involuntary motion is manifested as overflow in the spastics and rigidities, athetosis in the athetoids and tremor in the tremor groups. The overflow in the spastic patient or the rigidity patient is treated by bracing and by learned relaxation during motion. Drugs such as Dilantin Na and Mesantoin may be used in conjunction with physical therapy to overcome the overflow mechanism and give relaxation during motion. The approach to athetosis is by the learned relaxation training of Jacobson. Control braces are used to channel motions into desirable patterns while the learning of relaxation and control is going on. Tremors rarely interfere with balance as such.

Ataxia denotes that lack of balance wherein there is a fundamental disturbance of the kindesthetic sense due, in the cerebral palsied, to some cerebellar involvement. This group of cases tends to make a spontaneous recovery by the age of 10 to 12. In order to develop balance at an earlier age in ataxia straight forward balance practice is employed to develop the faculty. The eyes must orient the person in space so as to relieve the embarrassed deep sensorium. Short bar braces with single or double stops, or rarely longer braces, are used not infrequently to enhance foot stability and hence afford a more firm foundation for the learning of standing balance.

Apprehension is another factor interfering with balance in many of the cerebral palsied patients. Apprehension stems in good part from the knowledge of inaptitude in balance or gait together with the experience of previous falls. An important aspect of the approach to these patients is the teaching of the correct way to fall so that the individual learns to fall without harm. This helps to remove the fear of falling associated with attempts at balancing and hence facilitates the learning of these acts. With this goes intensive work to develop the ability to control the musculature in maintaining the righting reflex.

A certain number of patients fail to obtain standing balance because the level of intelligence at which their brain functions is below the minimum seemingly necessary for balance.

SUMMARY

An outline of some of the important considerations in balance training in cerebral palsy are presented. Certain operative procedures have been mentioned and discussed. It should not be thought that the operative approach is the most important phase of the rehabilitative measures in cerebral palsy. The operative phase of the work is the least important. Physical therapy and occupational therapy, muscle training, and education, are the important tools in the rehabilitation of this neuromuscular disorder.

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Pentergot

A New Agent for the Symptomatic Treatment of Migraine

ROBERT E. RYAN, M.D., *St. Louis*

THE SYMPTOMATIC treatment of migraine has, in the last several years, been a wide speculative field. There have been so many preparations initially presented in the medical literature as being successful that it would be impossible to name them all. The odd thing about the vast majority of these preparations is that they completely fade out of the picture soon after they are initially reported and, seldom if ever, are they heard of again in the field of migraine therapy. Various hormones have been used such as: Follutein,[1] Autuitrin S,[2] and Progesterone,[3] but these have proven to unsuccessful and have been discarded. Progynon[4] and pituitary extract[5] have also been reported on but are no longer used because their effects on migraine attacks have been found to be less successful than the initial reports indicated.

Various other preparations have been reported in the past, such as: Carbachol,[6] Emmenin,[7] Prostigmine,[8] Calcium lactate,[9] vitamin B,[10] Potassium thiocyanate,[11] Peptone,[12] Riboflavin,[13] thyroid,[14] Benzedrine,[15] Benedryl[16] and Theophylline.[17]

During the last few years, several new preparations have been used in the symptomatic treatment of migraine and histaminic cephalalgia. The drugs now on the market for the treatment of these two vascular types of headache are Cafergot, D.H.E.-45, Octin and Valoctin. These preparations are used primarily to abort the headache attacks. The first report on Cafergot was made in 1948.[18] Further reports on Cafergot were made in 1949 and 1950.[19, 20] The first report on D.H.E.-45 was made by Horton[21] in 1942 and Peters[22] reported on Octin in 1949. All reports on these drugs for the symptomatic treatment were consistent in one thing, all drugs produced some side effects of mild nature and a certain number of cases would not respond. The percentage of failures varies with each individual agent.

I have stated before[23] that it is my opinion that it is a tension element which causes these failures. The tension factor is far more pronounced in the average migraine case than in the average histaminic cephalalgia case. In most of the reports on these preparations, the greater number of failures are found in the migraine group and not in the histaminic cephalalgia group. If a true breakdown of most migraine cases were made, I believe that a majority of them would be found to consist of a combination of migraine and tension.

To combat this tension element, I suggested the addition of a mild sedative to the already proven combination of ergotamine tartrate and caffeine. In 1951 a combination of drugs made up in a suppository form were reported.[24] This combination was experimentally known as E.C.B.P.-163. Since that time, there have been other papers which support the excellent results which were reported in this original article.[25]

Many migraine patients experience so much nausea and vomiting with attacks that it is practically an impossibility for them to retain any type of medication taken orally. This, plus the fact that absorption through the stomach is poor following nausea and vomiting, has led to the idea of the rectal suppository form of administration. A previous report was made on four types of suppositories used in migraine and histaminic cephalalgia which were found to be not too successful.[23]

This initial report made in 1951 on E.C.B.P.-163,[24] described the results obtained with the combination of 2 mg. of Ergotamine tartrate, 100 mg. of caffeine, .250 mg. of Bellafoline and 60 mg. of pentobarbital. The Bellafoline was added to combat the gastric side effects produced by the Ergotamine and caffeine combination.

Since this initial publication in 1951, much research has been undertaken to find a preparation which might be more successful than E.C.B.P.-163. This combination has been found to be far superior to the Cafergot suppository and the Cafergot tablet which have already been placed on the open drug market.[24, 25]

Recently, I have been using a suppository which is made up of 2 mg. of Ergotamine, 100 mg. of caffeine, 60 mg. of pentobarbital and .250 mg. of Hyoscyamine sulfate. This preparation is called Pentergot insert.* This differs from the original formula only by the replacing of Bellafoline with Hyoscyamine sulfate. These drugs are both parasympathetic inhibitors and have no effect on the relief from the headache attack at all, but are used merely to combat any gastric side effects which might occur. The Ergotamine tartrate acts as a sympathetic sedative and caffeine as a central stimulant. Of course, the pentobarbital is used for its sedative effect.

Therefore, since the basic drugs in the Pentergot insert and E.C.B.P.-163 are the same, one would expect just as excellent results with one as with the other, as far as relieving the headache attack is concerned. The results obtained with this new preparation have proven to be extremely satisfactory, and are shown in table 1.

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* Thanks to the Storck Pharmaceutical Company of St. Louis for supplying this research material.

TABLE 1

RESULTS OBTAINED

		Results			*Gastric*
	No. Cases	*Excellent*	*Good*	*Poor*	*Side Effects*
Pentergot Inserts ..	128	108 (86%)	14	6	2
Cafergot	110	81 (73%)	18	11	12
Cafergot Suppositories	68	18 (26%)	32	18	12

Excellent = complete relief
Good = partial relief
Poor = no relief

In many cases it was rather confusing to the patient when he was told to take a preparation rectally for the purpose of relieving his headache attack. It should be explained to the patient that this suppository will in no way act as a laxative but is merely intended to help relieve the headache attack. It should be explained further that the suppository should be taken as soon as possible after the headache attack starts. One suppository seems to be the best average dosage.

The merits of this combination of drugs has been known for several years, and now at last this may be obtained on the open drug market and the patients with these forms of vascular headache can obtain relief from their attacks.

The Pentergot insert produced little or no gastric side effects, as is found with the oral Ergotamine preparations. However, this preparation did produce side effects in the form of a sleepy sensation to various degrees.

In fact, 40 per cent experienced a tired or sleepy sensation to various degrees. Some of the patients felt only a "little sleepy," while others felt the sedative effect much more and slept for two or three hours. The usual report was that the patient took the suppository and about twenty or thirty minutes later the headache began to be less severe, but they felt sleepy. They would sleep usually from one to three hours and then they would awaken entirely free from the headache. The sedative side effects usually were no longer present when the patient awakened. It seemed that the degree of this sedative side effect was in direct proportion to the patient's size and body weight. The average size male patient actually experienced little or no side effects of this type whatsoever. It was the smaller individuals who had this difficulty. Usually the 100 to 115 pound female patient had a considerable amount of this sedative side effect. So, to counteract this, these patients were all instructed to cut their suppositories in half, lengthways. In the average case, when these patients followed these instructions, the sedative side effects did not present themselves and usually the headache attack was also not stopped. However, in some isolated cases one half of this suppository used by these patients of smaller stature, were sufficient to relieve the headache attacks. So, if this is the case, a full suppository is required and these patients will have to endure any sedative side effect which might present itself. Naturally, one half of these Pentergot inserts are useless in most cases in this report and are only recommended in these few isolated, selected cases of small statured individuals.

An example of the successful use of Pentergot inserts in a case of migraine is that of E. R., a married, white 38 year old female. Her headache was usually associated with nausea and sometimes with vomiting. Photophobia was often present along with scotomata. It was a periodic type of headache and the duration was usually for many hours or even a few days. There is a family history element in her case and her attacks are more severe during or just preceding her menstrual periods. She is a conscientious person with a responsible position. When she has had a hard, tense day at the office, she usually has some form of headache attack that evening or during her early sleeping hours.

A typical account of her use of Pentergot inserts follows: At 2:00 p.m. she began to notice pain in the eyes, across the forehead and the top of the head. In a few hours time the pain was much more intense, at which time she took two Cafergot tablets. An hour later she took another one. However, a few hours later the pain lessened, but it did not entirely leave. The pain became much more severe and was mainly on the left side of the face and head. Her stomach was upset and she was nauseated, but was unable to vomit, so she took one Pentergot insert rectally. In about twenty minutes she was slightly drowsy and went to bed. In approximately one half hour she had fallen asleep. She slept for about three hours and awakened completely relaxed and the upset stomach, pain in the head, neck and face had vanished completely. She stayed awake for about a half hour, then went back to sleep. She slept until 7:30 a.m., at which time she had no pain and felt fine throughout the day. This patient also received histamine injections according to the method used by Horton and the frequency and severity of her attacks were lessened. In this case in which Cafergot failed, Pentergot insert definitely was successful in relieving this typical migraine headache attack.

The migraine, histaminic cephalalgia and tension headache patients have long been looking for something to give them relief from their attacks. Pentergot inserts seem to be the answer to their problem. But, it should be remembered by both the patient and the physician, that these suppositories are for the symptomatic form of treatment only and their headache problem, to be treated completely satisfactorily, must be attacked both prophylactically and symptomatically. The physician will find Pentergot inserts solve the symptomatic phase of the problem, but his patient also wants something which will prevent future attacks, and the manufacturers of this new preparation make no claim in this respect whatsoever.

The dosage of the suppository form is one suppository taken at the onset of the attack. However, it does not seem necessary that the suppository be taken at the immediate onset of the attack. In many cases the patient was unable to take the suppository immediately, but it seemed to work about as well. This in itself is a great advantage of the Pentergot inserts over the oral preparations.

The reason, of course, for the continued research in the field of headache is to find a preparation which will be successful in aborting the attacks, but which will produce little or no side effects.

The initial results, reported in this paper, concerning the Pentergot inserts are extremely encouraging and it seems that this preparation will have a definite place in the field of symptomatic treatment of migraine, histaminic cephalalgia and the tension type of headache.

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Growth Energy in Cancer

A Working Hypothesis

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THIS HYPOTHESIS presents, by analysis, that cancer begins with physical and therefore physiologic maladjustment of cells which, in consequence, become deprived of their normal bioelectric potential, basically necessary for controlled growth and function; and that a continuing carcinogenic influence upon the maladjusted cell is basic to an abnormal cell multiplication rate and associated electropotential; both, in cancer, tending to increase in degree with individual periods of time. The acquired, abnormal, bioelectric cell energy of the maladjusted cells should be in direct relationship to an abnormally controlled rate of cell multiplication. The extreme maladjustment is cancer and, even more so, its metastatic cell. Each, by this hypothesis, must have acquired, in degree, their own malignant growth energy; a change from normal, parent tissue electropotential.

BIOELECTRIC POTENTIAL

Cell growth energy is conceived as a labile bioelectropotential which will maintain a compatible relationship with variable rates of cell multiplication and requirements of cell function. The normal bioelectric energy of a cell is made up of that generated by and transmitted to it. Some energy is lost in heat. Inherent bioelectric potential energy for cell multiplication and its regulatory control suggestively is genetic, and remarkably variable, not only of various tissues and organs, but of the entire body. It should be influenced by all the factors of life: food, race, sex, geographic locations, hormones, age, habits, work and disease.

Regulatory control of cell multiplication is seen in wound healing, embryonic growth and the rate of normal cell replacement of tissues. It is overcome to various degrees in cancer.

Potential bioelectric energy of the total body is the sum of bioelectric potentials of each tissue, organ or system. Special functions should require an increase or decrease in cell bioelectric energy during certain periods and phases of life, from embryonic life to senility; normal and with disease, including cancer.

In transportation, metastatic cells are entirely deprived of all bioelectric energy flow from their parent tissue, though it is conceivable that organic energy, as other requirements for metabolism, could be transmitted to them by way of blood, lymph or tissue fluids. Metastatic cancer may generate a greater electropotential than their cancer of origin, particularly when their rate of cell multiplication is correspondingly increased; as that of the primary malignancy should vary from the electropotential of its parent tissue.

A compatible electropotential energy ratio of certain cancer cells to that of the cells of the implant tissue may account for the frequent successful seeding of specific tissues by certain primary neoplasms, as well as the almost constant failure of these particular malignancies to implant other tissues.

MALADJUSTED CELLS

Cells congenitally misplaced, from those of a melanotic nevus to a minute cell rest, are physically and functionally isolated, maladjusted cells.

Cells pathologically displaced may occur as the result of all processes capable of producing atrophic or hypertrophic changes. Such cells are considered in this working hypothesis as functionally semi-isolated, semi-maladjusted cells, and premalignant to continued carcinogenic influences. Primary changes in function may precede cell displacement, as to their number, size and alignment or all three.

Would not the flow of tissue electropotential through either the congenitally misplaced or pathologically displaced maladjusted cells be altered? This should mean interference not only to normal reception, but of transmission and, therefore, possibly with retention or local development of electropotential tissue energy. This in turn suggests associated interference with the genetic bioelectric regulatory control of cell multiplication. Does this suggest that cell electropotential by these changes could be decreased, or increased (stored) and, therefore, that generation of bioelectric energy within these cells would receive either an increase or decrease in stimulation? This could gradually develop changes in the physical properties and quantities of their normal or acquired atoms.

An abnormal distribution of "malignant" bioelectric energy often is suggested by the arrangement of cancer cells, which may appear to be contracting or expanding, with more or less connective tissue, and this tissue at times appears to confine the flow of electropotentials. In bizarre growth, with an all-over cell jumble, an abnormal polarity of "malignant" energy flow may be sug-

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gested when the pathologic picture shows "currents" of cell flow through the tumor. Certainly these "currents" are not directed by channels of other tissue and, for this reason, suggest an erratic directional flow of "malignant" bioelectric energy through the cancer mass.

CARCINOGENS

Are maladjusted cells particularly susceptible to the effects of carcinogens? In answer, it may be stated that single carcinogens of pathogenic strength are not identified in association with many cancers, therefore one may postulate that carcinogens have synergistic action.

Analysis advises that a cell, recognized as congenitally or pathologically maladjusted, is premalignant in its functionally abnormal location, due to past cell displacing (early carcinogenic) influences. Therefore, that it may become malignant with secondary or continued action, either by a single carcinogen of pathogenic strength, or by combined variously weak, and therefore possibly unrecognized carcinogens, acting with synergistic strength to pathogenic effect. If this is true, then the recognized, maladjusted cell could be considered as more susceptible to carcinogens than a normal cell, as it already has been subjected to some cancerogenic influence.

Carcinogens capable of acting singly, or in combination, to synergistic pathogenic effect, may be considered under the following classifications:

1. Chemical; not only specific carcinogens, but chemicals in dilute strength, conveyed by air, soil or skin contact, by mouth and processes of digestion and metabolism. This would include changes in the Ph of tissues and fluids.
2. Trauma; direct, persistent or repeat type; indirect, pressure or pull by scar or benign mass, each definitely acting in association with other carcinogens.
3. Infection; the early and late results of infection, by virus, bacterium, fungus or parasite.
4. Hormonal; relates to functional energy of the total body or to specific organs and tissues. Consider enzymes and catalytic action.
5. Physiologic; relates to type, frequency, degree and duration and, therefore, to the effects of functional activity. Consider psychic stimulation.
6. Juxtaposition of diverse tissues; areas of contacting tissues, which may vary one from the other in function, structure and anatomic relationship, and therefore in bioelectric potentials.
7. Thermal; total or local individual variations, vocational, geographic.
8. Radiant energy; atomic, cosmic, solar, x-ray, radium.
9. Allergies; skin, gastrointestinal, respiratory or other organs, adding specific susceptibilities to carcinogenic stimulation.
10. Trophic; vascular, nerve changes, hormonal, age and disease.
11. Time; duration of local processes is an important factor in these considerations.
12. Pathologies; capable of producing hypertrophic or atrophic changes.

EXAMPLES OF SYNERGISTIC ACTION OF CARCINOGENS

Leukoplakia, of the mouth, at times is reversible; for example, when chewing tobacco is withdrawn. The tobacco may furnish (add) (1) chemical, (2) recurrent trauma by rough particles and (3) physiologic (chewing acts as the increase in functional activity), as the determining carcinogens. The primary cell displacing factors and primary carcinogens may have been poor dental hygiene, with its attendant trauma and infection, associated with unusual food and fluid intakes, with possible allergies (specific susceptibilities), and separate chemical and thermal factors, all acting with synergistic strength to pathogenic effect.

Experimentally, repeated trauma under aseptic conditions does not cause cancer. Repeated trauma, not aseptic, and by this hypothesis, with unrecognized, combined, weak, synergistically acting carcinogens, does cause cancer. An example in point: Oxen, long driven by a rope about the base of a horn, frequently develop cancer at the junction of horn and skin. Here there may be associated weak carcinogens acting synergistically to pathogenic strength. In this regard, consider: (1) repeated trauma by the rope at or near the (2) junction of two diverse tissues (electropotential conflict), skin and horn. In addition, soil may add many (3) chemicals, as important tars and carbon, and traumatic foreign bodies, as sharp particles of stone, particles of vegetable material, etc. all directly from the soil; (4) radiant energy; (5) trophic changes; (6) scar, as a factor in cell displacement; (7) infection, with its cell displacement possibilities.

A cutaneous horn in man may present similar conditions with less definite trauma, but again associated with many synergistically acting carcinogens, each in itself below pathogenic strength.

Cells of the melanotic nevus are congenitally misplaced. One may hypothesize that occasionally they acquire a malignant multiplication rate when subjected to the synergistic pathologic strength of several combined individually weak carcinogens, not recognized as such because they are ever present in normal life. In these regards, consider synergistic carcinogens: (1) trauma, from rub, pressure or pull, associated with clothing or work, which has long been considered important in these instances; also by sharp particles from industry, or soil in certain geographic locations; (2) radiant energy of all types; (3) chemical from soil, air, cosmetics, industry; (4) allergies (adding specific susceptibilities); (5) thermal; individual, geographic, and industrial; (6) infection or result of infection; (7) the junction of diverse tissues would be basic, that is, the great contrast, functionally, of the "black mole" with its individual bioelectric potential energy, suggestively partially used; compared with the active function of its surrounding tissue.

Atrophic as well as hypertrophic changes show cell displacement. In atrophic gastritis, for example, cells of the atrophic tissue are maladjusted in their relationship with those of the normal gastric mucosa. The most apparent associated continuing carcinogens may be eating or drinking too often, of hot, irritating or relatively indigestible substances. One may, in direct order, consider (1) physiologic, (2) thermal, (3) trauma, (4) chemical, (5) possible allergies, and (6) trophic, as combined carginogens acting synergistically to pathogenic effect.

Gastric ulcer represents a type of cell maladjustment; premalignant, when subjected to the continued action of the primarily responsible carcinogens, particularly when located in organs of either genetic or acquired predisposing function and electropotentials.

Cancer of the lung occurs without cigarette smoke. Apparently it occurs more frequently when a carginogen of cigarette smoke is applied intermittently, in dilute form and over a long period of time. Could this be a determining synergistic carcinogen?

LABORATORY AND CLINICAL INVESTIGATION

Experimentally, and later clinically, one may approach this hypothesis by correlating the pathologic picture, gross and microscopic, of malignancies, with their bioelectric potentials. These determinations could be made before, during and after experimentally produced cancers, and then treatment by altering internal secretions, temperature and chemical changes and by radiation; by adding or withdrawing carcinogens to normal and cancer tissue. *In vitro* studies can be done as the growth progresses. Clinically, one should evaluate the electropotentials before and after treatment of the malignancy and of the involved organ. These results should be related to the electropotential of the total body. One should note the possible buffering effect to the transmission (flow) of bioelectric energy by various amounts of cytoplasm, of fibrous and other tissues. One should establish an individual ratio between cell growth bioelectric potential and the number of mitotic figures per weight unit of tissue.

Electropotential has been measured by many scientists. An electronic galvanometer may assist.

Jones, Kivel and Bless,[1] working with seeds conclude that "high yielding seeds have higher bioelectric potentials than those of low yielding varieties." "The bioelectric potentials of seeds is zero at dormancy and rises slowly during the first few hours in a humid environment." "The potential rises more rapidly as soon as coleoptile elongation begins." "X-rays in general decrease the bioelectric potential of plant seed and lower their potential." These authors state that "the electrode system used for measuring the bioelectric potential was patterned after that of Nelson and Burr."[2]

Burr[3] has studied "potential gradients" extensively, including cancer. He feels that "the most significant findings are those of Lund,[4] who showed an important relationship between potential differences in growth and regeneration."

These few references have interesting application to this working hypothesis.

Treatment by this hypothesis should consist of altering or withdrawing all associated carcinogenic influences capable of synergistic action before and after surgical removal or destruction of major malignant masses. The electropotentials of the entire body and of the involved organ, and their relationship to pathology of the malignant area, would require pre-treatment evaluation, then post-treatment evaluation after surgery; temperature, radiation, chemical, vascular, hormonal efforts, used singly and in combination, to control the malignancy.

3720 Washington Blvd.

My thanks for helpful consultation in this work to E. V. Cowdry, Ph.D., Director Wernse Cancer Research Laboratory, Washington University, St. Louis, Missouri.

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Burr, H. S.: Changes in Field Properties of Mice with Transplanted Tumors, Yale J. Biol. & Med. **13**:783 (July) 1941.

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Book Review

Let's Eat Right to Keep Fit by Adelle Davis, A.B., M.S., Consulting Nutritionist. Harcourt, Brace and Company, New York. 1954. Price $3.00.

Many national problems, the author assures us, may be traced to faulty eating habits! Taxpayers' money is wasted because poorly nourished school children, beset by fatigue, irritability and exhaustion cannot learn. Automobile accidents and divorce may result from low blood sugar. Poliomyelitis is contracted only when the blood sugar is particularly low. Inositol cures baldness; biotin relieves near psychotic depression. And of hundreds of tongues examined by the author during the last several years only three were normal!

The statements in the preceding paragraph are illustrative of the author's "scientific" presentation of the manner in which right eating (?) will insure fitness. B. Y. G.

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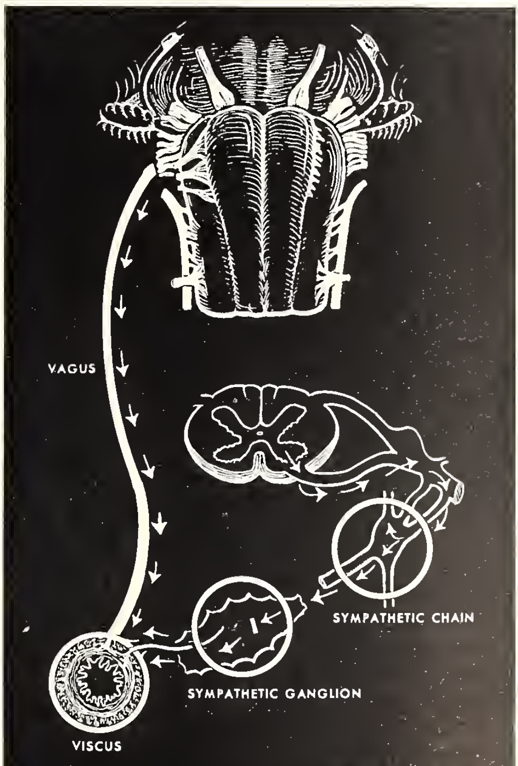

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For the average patient one tablet of Pro-Banthine (15 mg.) with each meal and two tablets (30 mg.) at bedtime will be adequate. G. D. Searle & Co., Research in the Service of Medicine.

---

1. Schwartz I. R.; Lehman, E.; Ostrove, R., and Seibel, J. M.: Gastroenterology *25*:416 (Nov.) 1953.
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SEARLE

Case Report

Purpura and Pregnancy

ROBERT W. SMITH, M.D., PAUL T. BERRY, M.D., AND GEORGE GARY, M.D., *Marceline, Mo.*

THIS CASE IS presented because of its unusual sequence of events, the interest a number of doctors have already had in the case and an important question of the patient's had to be answered.

Mrs. S., 25 years of age, was first seen on August 1, 1950. She was joyously pregnant, her first. On routine history, she said that she had had three episodes of bleeding from the rectum. Once when she was 12, again at 16 years and, again, a smaller amount, in 1949, at which time she was examined thoroughly by competent men, but no definite diagnosis was made.

Routine examinations, including complete physical, blood count and urinalysis, were normal. The patient was checked again in three weeks and then every four weeks until January 19, 1951 when she was admitted to the hospital bleeding severely from the rectum.

This patient had a small amount of bleeding from the rectum on January 14, 1951, and again four days later. On January 19, 1951, she began to hemorrhage bright red blood from the rectum. These were the first episodes of bleeding since 1949.

Upon admission to the hospital, Hb. was 81 per cent, red blood count 3.5, hematocrit 29 mm., bleeding time 3 minutes, clotting time 4 minutes and platelet count 67,700. She was given 1,000 cc. blood within the first eighteen hours and the next morning, her blood picture was about the same except a drop in the hematocrit which meant that she was hemorrhaging faster than blood was being replaced.

On January 21, 1951, consultation by an internist and pathologist revealed the following:

"This patient presents a typical history of thrombocytopenic purpura complicated by pregnancy. Bone marrow study reveals few megakaryocytes. In view of a slowly rising platelet count after eight transfusions and in the absence of a fairly normal megakaryocyte count, splenectomy should not be undertaken."

Likewise, we were reluctant to do a cesarian section to save the baby. We felt that supportive measures were the program at that time, especially since we could not be sure of the fetal heart.

Transfusions were continued for two more days, just barely keeping pace with the bleeding. On January 23, Mrs. S. went into labor. A stillbirth was delivered with considerably more bleeding. The bleeding from the rectum and vagina seemed to check rather dramatically after expression of the placenta. The lost volume of blood was replaced and on the following day, the Hb. was 78 per cent, red blood count 4.1 and platelet count 144,720. A total of twenty three transfusions was given.

After hospitalization she had a complete x-ray check of the gastrointestinal tract by a competent radiologist with negative results and a recheck on the bone marrow which showed a normal megakaryocyte count. The platelet count remained good, ranging from 168,000 on dismissal to 224,000 six months later.

On readmission to the hospital March 16, 1952, for splenectomy, the platelet count was 121,000. The operation was done without any trouble. Six days later the platelet count was 303,000 and ten days later, it was 1,160,000.

Mrs. S. was in the best of health and again came in on June 16, 1953, with an eight weeks pregnancy. Laboratory examination at that time revealed the platelet count to be 354,000. She seemed to progress nicely until October 29, 1953, when she started spotting. She was hospitalized for observation. The patient continued to spot off and on without much change in her blood picture.

On November 9, 1953, she began to bleed more profusely and passed large clots. About 10:30 a.m. she had rather severe pain in the lower left quadrant. Examination revealed some tenderness in that region but no contractions or undue hardness of the uterus.

Mrs. S. began to bleed more until it became apparent that cesarian section was necessary to save the patient's life. Fetal heart tones were not audible on this date. A section was done. Free peritoneal fluid and air was found. Plastic exudate was noted over the small bowel above the uterus. The section was completed. A stillborn infant was extracted. The upper abdomen was explored and a ruptured Meckels diverticulum was found which was removed at its base and the base sutured.

Mrs. S. made an uneventful recovery. Upon dismissal, laboratory results revealed Hb. 84 per cent, red blood count 4,530,000, platelet count 225,000.

Mrs. S. nearly lost her life twice in pregnancy. We were faced with the problem of advising her whether or not another pregnancy might cost her her life.

It is our feeling that Mrs. S. had a thrombocytopenic purpura, in view of her bleeding during her teens and later, also in view of her decreased platelet count and megakaryocytes. We feel that her excessive rectal bleeding may have come from an ulcer in the diverticulum augmented by the purpura. The splenectomy rectified her thrombocytopenic purpura.

We believe that the bleeding during her second pregnancy was due to premature separation of the placenta which was further evidenced by a small recent infarction of the placenta.

The diverticulitis with perforation was incidental and now that the diverticulum is gone, Mrs. S. should have no fear of further bleeding.

Even with all of this rationalizing, with fear and trepidation, we advised the patient that she should try still another pregnancy.

With anxiety we watched her through another pregnancy and this time we were determined to get a live baby. Three days before she was scheduled for a section, she ate a large amount of rhubarb which induced labor within a few hours. She delivered a live female baby on January 13, 1955, without any trouble whatsoever. Her platelet count is 167,000.

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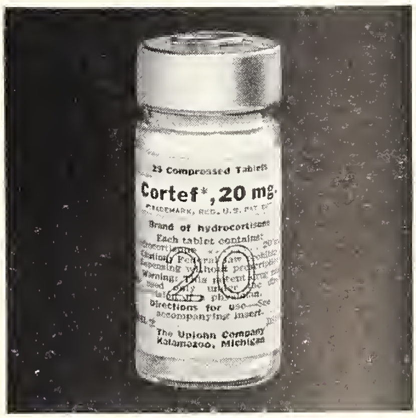
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Special Article

Medical Education and Licensure

LYNN P. ZIPIN, *St. Louis*

A PERENNIAL question posed by medical students and doctors has to do with testing and pedagogical methods in medical education, with particular reference to licensing, certification and basic policy considerations. Recently, with the rather fundamental revamping of certain basic premises in this area by the National Board of Medical Examiners, there has been an increasingly large number of queries on various aspects of this whole general problem.

The persistence of these questions, which generally take the form of "How does the National Board work?" and "Where can I find complete information on the subject?" is ample evidence that there is a definite need felt by many for a convenient consolidation of authoritative tools and sources of information in this connection. Moreover, there is an apparent lack of any point of departure on the part of many for locating the answers to their questions.

In view of this demonstrated interest by anyone concerned either directly or indirectly with such considerations, the following compilation of selective sources has been assembled as a key to important existing sources of information.

I. Role of Educational Testing Service of Princeton, N. J.: Because of the dynamic nature of medical education matters with the continual re-evaluation of basic tenets and subsequent changes in testing policy and, further, because of the diverse official and quasi-official sources from which important discussions and decisions emanate, essential information is scattered in a number of places and does not, unfortunately, appear in a convenient "book." With reference to the Educational Testing Service itself, some of the most definitive statements appear in paper bound pamphlets. It should be noted that additional detailed bibliographies are appended to many of the publications and articles listed. These include references to technical phases of theory, methodology and pertinent educational psychology considerations.

A. *Educational Testing Service, Annual Report to the Board of Trustees,* ETS, 20 Nassau St., Princeton, N. J. This is a comprehensive publication giving the structure of the agency with all subdivisions and officers thereof. In the section entitled "Testing Programs at the Postgraduate Level" is information pertinent to medical schools. There is an extensive bibliography at the end of this publication.

B. *Educational Testing Programs for Individual Selection: Scholarship Competitions, Educational Evaluation, Professional Certification,* ETS. This is a more brief information bulletin of ETS activity.

C. *National Board of Medical Examiners, Bulletin of Information,* NBME, 133 S. 36th St., Philadelphia, October 4, 1954, revised.

D. *National Board Examinations, Parts I and II, Preparation and Content of the Multiple Choice Examinations of the National Board of Medical Examiners,* NBME. Publications noted in C and D are general statements of the new kind of testing. Included are sample questions and a discussion of goals.

E. *Examination Questions, Parts I and II, Bulletin.* These booklets, which gave a cumulative listing of questions asked in all subjects were formerly published at four year intervals. Publication of these ceased with the change to present objective multiple choice type of questions. The questions are still of limited value for review.

II. Journals which serve as media for conveying all kinds of information concerning officers, testing dates, content and locations, new views of examinations and sample questions are as follow:

A. *Diplomate.* This ceased publication in 1953. It was published five times during the college year by the National Board as the medium through which candidates, Diplomates and members of the National Board, as well as others interested, were kept informed of the Board's work and progress. In addition to publishing news of the medical colleges and developments in medical education, the *Diplomate* reported activities of general interest to undergraduates. Back volumes are helpful in tracing trends, official opinions and current status.

B. *Federation Bulletin.* This is published monthly by the Federation of State Medical Boards of the United States, Federation Press, 535 N. Dearborn St., Chicago 10, Ill. It is an official publication of national importance. Because of the auspices under which it is published, it is a key source for all aspects of licensing and testing.

C. *The Journal of the American Medical Association.* This is the official organ of the A.M.A. As such it is an official and primary source of information. In its weekly issues appear regular departments on "Examination and Licensure," national and international news and recent developments in federal and state matters. Of particular importance are the several special issues which appear yearly and which are as follows:

1. Education issue.
2. Hospital issue.
3. Internship and Residency issue.

Librarian and Instructor in Medical Bibliography, St. Louis University School of Medicine.

4. Postgraduate Courses issue.

5. State Board issue.

6. Issues published on occasions of annual meetings with abstracts of proceedings of sections of the A.M.A. The Council on Medical Education and Hospitals of the A.M.A., 535 N. Dearborn St., Chicago 10, Ill., is the section of the A.M.A. actively engaged in educational matters.

D. *Bulletin of the American College of Surgeons.* This is a bimonthly which serves as the official organ of the American College of Surgeons. Although this is not a primary source, it is definitely a general nonclinical publication with much information in medical education, chiefly for the upper classman or M.D. It, too, publishes special issues including convention numbers and listings of matters relating to residencies, postgraduate courses and medical motion pictures.

E. *Journal of Medical Education.* This is a monthly publication serving as the official organ of the Association of American Medical Colleges, 185 N. Wabash Ave., Chicago, Ill. It is one of the most significant records for all ramifications of medical education.

F. *National Medical Examiner.* This is now the official publication of the National Board, and has superseded the *Diplomate,* starting with volume 1, number 1, January 1954. It is "published monthly during the academic year as a news bulletin containing matters of interest to students and teachers, to physicians seeking licensure, and to members of the state boards who are responsible for granting licensure." It is the pulse of current developments and latest data on examination content. It is a primary source.

G. Because of the official auspices under which they are published, it is inevitable that the numerous regional journals (official organs of state, county and municipal medical societies) contain regular sections on medical education matters. Also, the official publications of the several specialty societies provide news in this direction. The *Ohio State Medical Journal,* for example, has for some time published a list of questions asked in Ohio in a spring issue. A list of regional and specialty journals is conveniently found in the A.M.A. Directory. A more inclusive listing is contained in the introductory pages of the volumes of the "Quarterly Cumulative Index Medicus."

III. The following selected articles are pertinent to testing:

1. Cowles, John T. (Senior Project Director, Educational Testing Service), "Current Trends in Examination Procedures," Fed. Bull. 40:259-273 (September) 1954. (Read at a meeting of Advisory Board for Medical Specialties, 50th Annual Congress on Medical Education and Licensure, Chicago, Feb. 7, 1954.)

2. Cowles, John T., and Hubbard, J. P., "Validity and Reliability of the New Objective Tests," J. M. Educ. **29**:30-35 (June) 1954.

3. Darley, Ward (President, University of Colorado, and past president of Association of American Medical Colleges), "Medical Education and the Potential of the Student to Learn," J. M. Educ. **29**:11-20 (February) 1954. (Presidential Address.)

4. Hubbard, J. P., and Cowles, J. T., "A Comparative Study of Student Performance in Medical Schools Using National Board Examinations," J. M. Educ. **29**:27-37 (July) 1954.

5. Moore, Robert A. (Dean, Washington University School of Medicine and a member of the Examination Committee of the National Board of Medical Examiners), "Methods of Examining Students in Medicine," J. M. Educ. **29**:23-27 (January) 1954.

6. Morris, Don P., and Miller, Carmen, "The Relationship Between Chronological Age and Success in Medical School," J. M. Educ. **29**:38-43 (January) 1954.

7. Stalnaker, John M. (Director of Studies Association of American Medical Colleges), "The Study of Applicants for Admission to United States Medical Colleges, Class Entering in 1953-1954," J. M. Educ. **29**:13-21 (April) 1954.

8. Whitby, Sir Lionel, "The Challenge to Medical Education in the Second Half of the Twentieth Century," Diplomate 25:89-95 (Nov.-Dec.) 1953. (President's Address at First World Conference on Medical Education, London, August 24, 1953.)

IV. Supplementary Materials:

A. The annual education issues of the British journals, *Lancet* and *British Medical Journal* appear in the fall. These are actually monographs devoted to articles on medical education and should be designated as primary sources.

B. The A.M.A. Directory gives the complete medical practice act, including licensing information, for each state, together with officers and publications of official agencies. A new edition will be published in June 1955. Reciprocity agreements between the states are included in many cases.

C. The Directory of Medical Specialists, published at regular intervals by the Marquis Co. gives essential certification information, criteria and lists qualifications for the various specialty boards. As such it is, indirectly, an important educational syllabus from the standpoint of specialty training.

D. The following recent books and a few classics of older imprint date provide valuable background material:

1. Allen, Raymond Bernard, *Medical Education and the Changing Order,* New York, The Commonwealth Fund, 1946.

2. A.M.A. Council on Medical Education, *Medical Education in the United States, 1934-1939,* prepared for the Council on Medical Education and Hospitals by Herman C. Weiskatten and Alphonso W. Schwitalla, S.J., Chicago, A.M.A., 1940.

3. Commission on Medical Education, *Graduate Medical Education: Report of the Commission on Graduate Medical Education,* Chicago, University of Chicago Press, 1940.

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4. Deitrick, John E., and Benson, Robert C., *Medical Schools in the United States at Mid-Century: Survey of Medical Education,* New York, McGraw-Hill, 1953.

5. Drake, Daniel, *Practical Essays on Medical Education and the Medical Profession in the United States; With an Introduction by David A. Tucker,* Baltimore, Johns Hopkins Press, 1952. (Classic.)

6. Flexner, Abraham, *Medical Education in the United States and Canada,* Carnegie Foundation Bulletin, No. 4, New York, Carnegie, 1910. (Classic.)

7. Flexner, Abraham, *Medical Education: A Comparative Study,* New York, MacMillan, 1925. (Classic.)

8. Goepp, Rudolph M., *State Board Questions and Answers,* 8th ed., Philadelphia, W. B. Saunders, 1950.

9. Joint Committee on the Teaching of the Social and Environmental Factors in Medicine, *Widening Horizons in Medical Education; A Study of the Teaching of Social and Environmental Factors in Medicine, 1945-1946,* New York, The Commonwealth Fund, 1946.

10. Rypins, Harold, and Bierring, Walter L. (ed.), *Medical Licensure Examinations; Topical Summaries and Questions,* 7th ed., Philadelphia, Lippincott, 1952.

11. Severinghaus, Aura E.; Carman, Harry H., and Cabury, W. E., *Preparation for Medical Education in the Liberal Arts College; The Report of the Subcommittee on Preprofessional Education of the Survey of Medical Education,* New York, McGraw-Hill, 1953.

12. Sigerist, Henry E., *The University at the Crossroads; Addresses and Essays,* New York, Shuman, 1946.

13. World Medical Association, *Proceedings of the First World Conference on Medical Education, London, 1953; Held Under the Auspices of the World Medical Association,* London, Oxford University Press, 1954.

St. Louis University School of Medicine.

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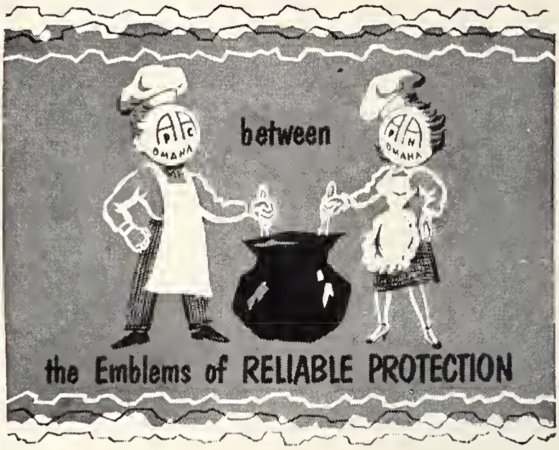
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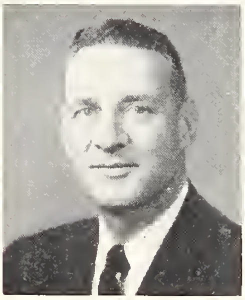
President's Page

House Bill 339 was introduced on February 28 by Representative Robert Copeland of St. Louis County. It was referred to the Committee on State Offices.

The bill creates a State Board of Medicolegal Examiners, composed of the Attorney General, the State Director of Health, the Superintendent of the State Highway Patrol and four persons appointed by the Governor, two of whom shall be members of the bar, and two of whom shall be pathologists. The Board shall appoint a chief state medicolegal examiner, three associate examiners and ten assistant examiners, all of whom shall be physicians who shall have had postgraduate training in pathology.



The bill abolishes the office of coroner and provides for the investigation of the circumstances of certain deaths, under the jurisdiction of the Board.

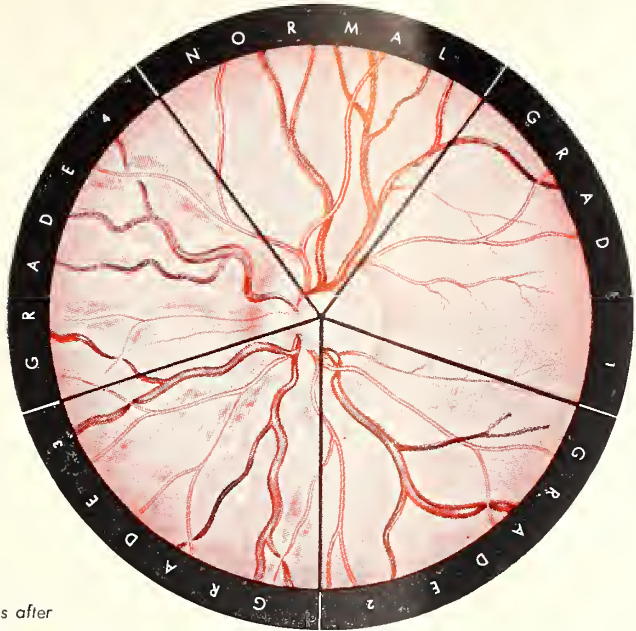
This legislation has been studied for many years by the Missouri Society of Pathologists, by the standing Committee of the Missouri State Medical Association on Laboratory Medicine and the Missouri Bar Association. The bill, as introduced, represents the best thinking of many persons in Missouri and elsewhere who have considered the circumstances of deaths.

The National Municipal League in 1951 published a booklet, "A Model State Medico-Legal Investigative System," which was a joint report of the following organizations: American Academy of Forensic Sciences, American Bar Association, Criminal Law Section, American Medical Association, American Judicature Society, National Civil Service League and the National Municipal League. Copies of this interesting booklet may be obtained from the National Municipal League, 299 Broadway, New York 7, New York.

Massachusetts, New York, Maryland, Maine and Virginia are states which have had medicolegal examiners for many years. The expert services provided in these states have brought about dramatic improvements through the years.

Members are urged to support House Bill 339. Questions relative to it may be referred to the Committee on Laboratory Medicine at the headquarters office.

M.D.



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Keith-Wagener-Barker classification*

In hypertension, effective reduction of blood pressure is assured in 90% of appropriate cases when dosage is fitted to the requirements of the individual patient. Response is reliable, uniform, prolonged. By-effects are minimal. Convenient t.i.d. oral tablet medication.

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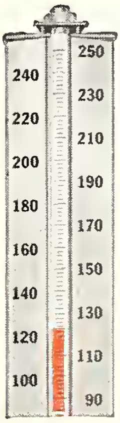

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EDITORIALS

The Man Who Slept With the Tiger

Once upon a day a man awoke to find himself in bed with a sleeping tiger.

"Ye gods," said the man, "I have been in some messes before but nothing to equal this."

So saying he considered, for a moment, the nature of the tiger. If he moved the tiger would awaken and would devour him on the spot. Moreover, it seemed from shreds of loin cloth left carelessly dangling from the tiger's teeth, that this particular beast was indeed a veritable gourmet among tigers.

Now if the man remained quiet the tiger might sleep for a time but would surely awaken hungrier than ever.

At this point our hero remembered that he always kept a ridiculously small gun beneath his pillow. This he carefully aimed between the tiger's eyes.

The tiger yawned prodigiously and opened first one eye and then the other. Even though he was more than somewhat hungover (which honestly accounted for his being in this particular bed to begin with) he was perfectly able to see the gun held waveringly at his head.

"Ye gods," said the tiger, "I have been in some messes before but nothing to equal this."

Said the man, "I am certainly going to shoot you for I have much to do today and have not time to be eaten."

Said the tiger, "Oho!" said he, "Shoot if you will this old gray head but that isn't exactly an elephant gun you have there. Before I die," he added verbosely, "your shredded remains will rest in a small corner of hell reserved for foolish people who inadequately shoot tigers."

After this wordy statement, even for a hungover tiger at 8:00 a.m., the conversation bogged down and each considered the assertions of the other and found them dismally true.

Now this story, pure fiction of course, is not without a moral. The man and the tiger lived happily, if somewhat apprehensively, together ever after. And the insurance rates on people sleeping with tigers really dropped a great deal.

All this reminds us that we sleep with a tiger also. The Single Licensure Bill has received the endorsement of the Missouri State Medical Association and the Missouri State Osteopathic Association. Its chance of passage by the legislature is believed favorable.

This bill is inevitable and desirable. It will present a host of problems for all concerned but its avowed purpose is "to provide the people of Missouri with better medical care now and in the future."

No problem is so large as to defy solution when men will talk together and none is too small to become unsolvable if they will not. At this late hour we have finally talked out our differences.

Like the man in the story we will often live in apprehension but this bill deserves the best we can give it. It has been designed by our own Association. The greatest benefits will accrue with the passage of time.

It is a time for level heads.

W. E. Wooldridge, M.D.

(Reprinted by permission from the *Greene County Medical Society Bulletin.*)

Television

A television program showing the ill effects of noise on people—and methods of protecting our workers and citizens at large against noise is responsible for this editorial.

We are put too much in touch with the world by radio and television. It is true that we can turn them off if we want to, but before we know it they have been booming a long time before we realize that we really want relief by turning them off or changing programs.

Perhaps we are most victimized through television. Through television, so to speak, everyone has access to our homes. The whole television world comes into our homes. The plan is to give us entertainment and while someone has our attention he exposes us to advertisement. If the entertainment is good we have yet the advertising to deal with. Some advertisers are over-loud, overemphatic, and raucous—they spoil the good effects of the program. They scream "Hurry, Hurry, Hurry," like some carnival barker. They disturb us in our homes where we should find things restful. We have heard people aver that they will avoid using this or that product just because of disagreeableness on the part of the one giving the advertisement, even though the entertainment be good. On the other hand, we have sponsors who give us excellent programs and who seem to sense that they are in our homes and who, therefore, are pleasing in their manners and sales talk, just like we wish visitors to behave. Some sales talks are given by so gracious and considerate individuals that it is as much a pleasure to hear them as it is to listen to their fine programs.

What we should demand in our homes is restful quiet dignity in fair proportion to the hilariousness in our TV programs.

F. T. H'Doubler, Sr., M.D.

Not All Comments Are Bad

Many physicians feel that the medical profession gets a "bad press' but there are some outstanding examples of a "good press," among them is one from the *Buffalo Reflex* of February 24, under the heading "Justified Confidence." It reads:

"There has been a lot of loose criticism of doctors and of the medical profession. The guardians of our health have been damned on all kinds of grounds, from allegedly excessive fees to alleged indifference to patients' welfare.

"The *Minneapolis Sunday Tribune* decided to find out just how widely such views are held. It conducted a survey covering the entire State of Minnesota. This survey revealed that two thirds of the people consider doctors' fees reasonable; that more than four out of five are satisfied that doctors 'take a personal interest in their patients and their troubles'; that most are confident that if they called a doctor to make a home visit he'd come, and that 87 per cent believe doctors are better trained nowadays than they've ever been before.

"That certainly indicates that the public at large has a high degree of justified confidence in the ability and integrity of our doctors. Medicine is not perfect—any more than industry, government or labor are perfect. But it gets better all the time —as is attested by the fact that the health of the American people is at its highest level in history."

A Bale of Hay Needed

Undoubtedly privately endowed medical schools have felt the sting of inflation for a good many years. Educational costs have skyrocketed along with material costs. Government spending with its resultant high taxation at both local and federal levels has decreased the number and volume of philanthropic sources of revenue customarily relied upon by medical schools and hospitals.

This situation has progressed to such a degree that, in desperation, responsible faculty members of private medical schools claim that only two alternatives exist in solving their financial problems. Either they accept government subsidies or they enter the corporate practice of medicine. Of the two they favor the latter. The American Medical Association is opposed to both. Most certainly the former would lead to socialized medicine and either would eventually lead to chaos in medical care.

Now, actually, philanthropy has not completely disappeared. It still exists but to a somewhat lesser degree. The greatest problem of medical schools relative to philanthropy has always been the fact that most of the larger gifts are earmarked for specific purposes designated by the donor. No free choice in the use of funds so received exists. As an example, funds are designated for the building of a large structure honoring the memory of the deceased without any provision being made to equip, maintain or staff the entire set-up. This leaves the University with a new beautiful building plus a headache in overhead. Each additional gift makes the campus larger and more beautiful until the headache becomes a migraine. State university medical schools supported by taxation seldom have the same problem. Funds for maintenance, although not easy to obtain, are usually more readily appropriated than are funds for new buildings or expansion programs. Consequently, they do not as readily outgrow themselves. They are thus compelled to live within their means.

The solution to the current problems of privately endowed medical schools is not simple but one step would help the situation. Efforts must be made by the attorney drawing up the will and by University authorities so involved to guide these philanthropic gifts into the channels where they are most needed. Eagerness to receive must be tempered by reason and diplomacy.

Of what good is a horse when you don't have a bale of hay?

Martyn Schattyn, M.D.

Missouri Health Council to Meet

The annual Spring Conference of the Missouri Health Council will be held at the Governor Hotel, Jefferson City, Friday, April 29, from 10:00 a.m. to 4:00 p.m.

Special programs dealing with major state-wide health problems are presented at these conferences. Representatives from some thirty-five statewide member organizations and from a like number of local county health councils as well as many other people interested in health attend these sessions. Attendances at previous conferences have ranged from 200 to 350 persons.

The program for April 29 will encompass: A discussion of current health legislation in the Missouri Legislature by a legislator; a résumé of activities of the Missouri Division of Health by James R. Amos, M.D., Director; a panel discussion on "Urgent Health Needs in Missouri" with a nurse, a school superintendent, a welfare worker and a physician participating; a report on the progress of the Medical and Hospital Indigency Study, and an address by Mr. Phil Ryan, New York, Executive Director of the National Health Council.

Victor B. Buhler, M.D., President, Missouri State Medical Association, will be the physician representative on the panel to discuss "Urgent Health Needs in Missouri." Physicians over the state are invited and urged to attend this conference.

Missouri Medical Meetings

St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.
Barton-Dade County Medical Society—third Wednesday of each month.
Benton County Medical Society—meets only on call.
Boone County Medical Society—first Tuesday of each month.
Buchanan County Medical Society—first Wednesday of each month.
Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.
Callaway County Medical Society—third Thursday of each month.
Cape Girardeau County Medical Society—first Monday of each month.
Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.
Clay County Medical Society—last Tuesday of each month.
Clinton County Medical Society—meets only on call.
Cole County Medical Society—first Monday of each month.
Cooper County Medical Society—first Monday after the 15th of each month.
Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.
Dunklin County Medical Society—first Tuesday of each month.
Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.
Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.
Greene County Medical Society—fourth Friday of each month.
Henry County Medical Society—meets only on call.
Holt County Medical Society—meets only on call.
Howard County Medical Society—meets only on call.
Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.
Jasper County Medical Society—second Tuesday of each month, September through May.
Jefferson County Medical Society—meets only on call.
Johnson County Medical Society—meets only on call.
Laclede County Medical Society—second Monday of each month at 6:00 p.m., at the Louise Wallace Hospital, Lebanon.
Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.
Lewis-Clark-Scotland County Medical Society—meets only on call.
Lincoln-St. Charles County Medical Society—third Thursday of each month.
Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p.m.
Miller County Medical Society—meets only on call.
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.
Moniteau County Medical Society—second Thursday of each month.
Newton County Medical Society—meets only on call.
Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.
North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.
Pemiscot County Medical Society—third Thursday of each month.
Perry County Medical Society—second Thursday of each month.
Pettis County Medical Society—third Monday each month September through May.
Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.
Pike County Medical Society—third Tuesday of each month.
Platte County Medical Society—meets only on call.
St. Louis County Medical Society—second and fourth Wednesday of each month.
St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.
Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.
South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.
Vernon-Cedar County Medical Society—meets only on call.
Webster County Medical Society—meets only on call.
West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

Some 450 people from all sections of the United States attended the Tenth National Annual Rural Health Conference, held at the Schroeder Hotel, Milwaukee, Wisconsin, February 24-26, 1955.

"Looking Both Ways" was the theme of the conference. The objective was to look back over the last nine years and evaluate the previous conferences in terms of their influence on rural health throughout this country. Then, armed with history from the last nine years, an added objective was to set a course, looking toward action for still further improvement of rural health.

Dr. F. S. Crockett, Lafayette, Indiana, chairman of the Council on Rural Health of the A.M.A., hit the keynote for this year's conference in his opening remarks when he pin-pointed the signal importance of the individual, assuming his dual responsibility for personal health and for cooperation with others in combatting local health problems. He stressed "knowing and doing the simple things that keep us well," such as, eating well balanced meals, immunizing against communicable diseases, and screening doors and windows. "Doctors and hospitals cannot keep us well if we break the accepted good health rules," he said.

On Thursday morning, February 24, the session was devoted to discussions of the activities of State Medical Association Rural Health Committees.

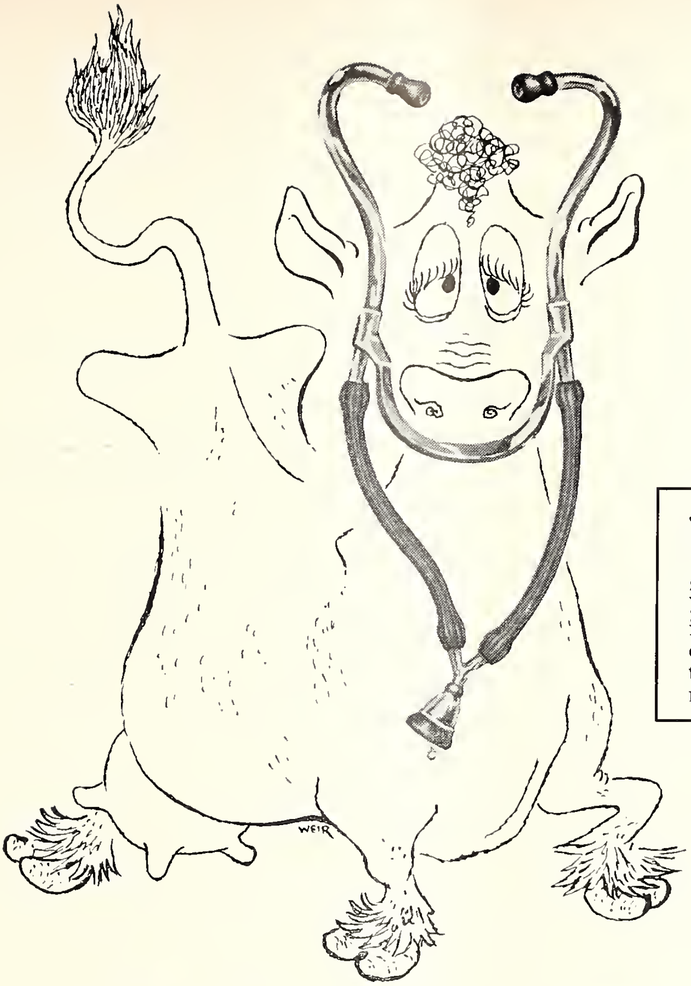
Beginning Thursday afternoon and running through until noon Saturday, such pertinent topics as "Farm and Home Safety," "Family Responsibility for Health" and "Using Our Present Health and Medical Care Resources" were discussed.

Spirited audience participation in the discussions throughout the conference was ample proof of the interest in the problems presented.

These National Rural Health Conferences are sponsored by the Council on Rural Health of the A.M.A. in cooperation with National Farm Organizations.

Those in attendance included: Practicing physicians, public health doctors, nurses and health educators, agricultural extension personnel, farm organization representatives, 4-H club members, farmers, medical society representatives, rural sociologists and Blue Cross and Blue Shield representatives.

Ten Missourians were registered at the conference.



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zo'oid *(zō'oid), n.* An entity which resembles but is not wholly the same as a separate individual animal; a more or less independent animal produced by fission, proliferation, or the like, and not by direct sexual methods.

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"Something we can depend on to pay most of the hospital bill . . . not just so many dollars toward this and that." And you know they mean Blue Cross, because its benefits are in terms of **service,** not limited cash dollars.

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Members in the News

An honored guest at a tea given by sponsors and friends of the Greater Kansas City Foundation for Exceptional Children on February 22, was **Cecil G. Leitch**, M.D., Kansas City, president of the Missouri Association for Retarded Children.

The Missouri Division of the American Cancer Society held a district meeting in Cape Girardeau on February 9. Taking part were **C. W. Meinershagen**, M.D., Jefferson City, and **Frank W. Hall**, M.D., and **Milton Shoss**, M.D., Cape Girardeau.

Recently **Carroll P. Hungate**, M.D., Kansas City, was selected as a member of the Founders Group of the American Board of Aviation Medicine.

At a Philharmonic "pop" concert on February 19, two songs were presented which were written by **Vincent T. Williams**, M.D., Kansas City. Appearing in the quartet which presented them was **John S. Myers**, M.D., Kansas City.

A farewell party was given by the members of the staff of the Lamar Clinic on February 9 for **Alvin R. Cain**, M.D., Lamar, who was leaving to enter military service.

The staff of the Samaritan Hospital, Macon, recently elected **Howard S. Miller**, M.D., Macon, as staff chairman.

The *News-Leader*, Springfield, on February 20, carried a picture and feature story on **E. M. Box**, M.D., retired Springfield physician.

Attending the meeting of the Central Surgical Association in Chicago February 17 to 19 were **Walter W. Cummins**, M.D., and **Claude J. Hunt**, M.D., Kansas City.

As a member of the board of governors from Missouri, **Lawrence P. Engel**, M.D., Kansas City, attended a section meeting of the American College of Surgeons in Cleveland on February 19.

The American Academy of Allergy at its annual business meeting in New York February 8 elected **Stanley F. Hampton**, M.D., Richmond Heights, president.

The Association of Medical Record Librarians of Greater Kansas City on February 9 heard **Charles F. Grabske, Jr.**, M.D., Independence, speak on "Foreign Bodies in the Esophagus."

"The Real Problem of Cerebral Palsy" was the subject presented by **R. E. Bruner**, M.D., Kansas City, at a meeting of the Cerebral Palsy Association of Greater Kansas City held February 15, after the meeting had been postponed from the month before because of inclement weather.

A crippled child, a patient in the pediatrics section, turned the first shovel in a ground breaking ceremony on February 9 at Burge Hospital, Springfield, for the crippled children's wing and nurses' home.

The *Southeast Missourian*, Cape Girardeau, on February 15, carried a feature story and picture of **W. W. Ford**, M.D., Gordonville, who began practice in Gordonville fifty years ago that day, his fifty-fifth year in medical practice.

Evacuation methods in case of an enemy attack was told members of the Noland P. T. A. at a meeting February 16 by **Robert F. Mosser**, M.D., Independence.

Frederick C. Robbins, M.D., Cleveland, a co-winner of the 1954 Nobel prize in medicine and physiology, was a speaker on February 21 at the University of Missouri, Columbia, where he formerly had been a student.

The tenth annual Hanau W. Loeb lecture at St. Louis University School of Medicine was presented on February 24 by Charles B. Huggins, professor of surgical urology at the University of Chicago School of Medicine.

"A Scout Today—a Citizen Tomorrow" was the subject of a talk given by **Durward G. Hall**, M.D., Springfield, at a luncheon of the Kansas City Chamber of Commerce on February 9. Dr. Hall is president of the Ozarks Empire council of Boy Scouts and the luncheon was the annual observance of the Boy Scout anniversary week.

About 200 physicians and ministers attended a meeting recently in St. Louis to hear a panel of physicians and ministers on mental and emotional ills. Physicians on the panel were **E. H. Parsons**, M.D., and **Lawrence E. Mendonsa**, M.D., St. Louis.

"Age Fails to Slow Practice of Two Doctors, 93 and 86" was the headline used by the *Kansas City Star* for an article about **Eugene H. Kelly**, M.D., and **K. P. Jones**, M.D., Kansas City, both of whom are still practicing.

An exhibit on traffic safety was shown by **Jacob Kulowski**, M.D., St. Joseph, at the annual meeting of the American Academy of Orthopedic Surgeons at Los Angeles the latter part of January.

New president of the Missouri Academy of General Practice is **George H. Wood**, M.D., Carthage.

Speaking at an institute for graduate nurses at General Hospital, Kansas City, on February 10 and

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relieves pain · improves function · resolves inflammation

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*Bunim, J. J.: Research Activities in Rheumatic Diseases. Pub. Health Rep. 69:437, 1954.

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11, were **V. Bryce Ballard**, M.D., and **Harry Statland**, M.D., Kansas City.

The annual dinner meeting of the Cooper County Heart Association, meeting on February 9, was addressed by **William A. Sodeman**, M.D., Columbia.

At a Mid-Atlantic Division Regional Meeting of the International College of Surgeons in Washington, D. C., on February 11, **Claude J. Hunt**, M.D., Kansas City, participated in a panel discussion on "Gallbladder Disease."

On February 16 **Roscoe L. Pullen**, M.D., Columbia, was guest lecturer at the Jackson County Health Forum. His subject was "What's the Heart Story?"

One of three guest instructors at a postgraduate course in endocrinology at the University of Oklahoma School of Medicine in Oklahoma City on March 3, 4 and 5 was **Willard M. Allen**, M.D., St. Louis.

On January 19 **George T. Gafney**, M.D., St. Louis, was elected president-elect of the St. Louis Surgical Society at its annual meeting.

The annual meeting of the International Congress of Urology, meeting in Athens, Greece, April 10 to 18, will be attended by **Grayson Carroll**, M.D., St. Louis.

At a two day session on "Carcinoma of the Breast" at the University of Oklahoma School of Medicine in Oklahoma City on February 18 and 19, **Lauren V. Ackerman**, M.D., St. Louis, was a guest speaker.

NEW MEMBERS

Cowdry, Edmund V., M.D., St. Louis
Neu, Robert E., M.D., Clayton
Palenske, Robert L., M.D., Hornersville
Turner, James H., M.D., Steele
Turner, William F., M.D., Steele
Valach, Frank J., M.D., Brentwood

DEATHS

Pickett, Clarence Porter, M.D., Princeton, a graduate of Ensworth Medical College, 1905; honor member of the Grand River Medical Society; aged 77; died January 28.

Schlueter, Robert E., M.D., St. Louis, a graduate of Missouri Medical College, 1895; Past President of the Missouri State Medical Association; honor member of St. Louis Medical Society; aged 83; died February 12.

Gale, Frank W., M.D., Bismarck, a graduate of Beaumont Hospital Medical School, 1900; honor member of the Mineral Area County Medical Society; aged 80; died February 18.

Carle, Horace W., M.D., St. Joseph, a graduate of the University of Louisville School of Medicine, 1940; member of the Buchanan County Medical Society; aged 39; died February 24.

Councilor District News

SECOND COUNCILOR DISTRICT

W. F. FRANCKA, HANNIBAL, COUNCILOR

Marion-Ralls-Shelby County Medical Society

The Marion-Ralls-Shelby County Medical Society and its Woman's Auxiliary held a dinner meeting at the Mark Twain Hotel, Hannibal, Tuesday evening, February 22.

Following an enjoyable social hour and dinner, the ladies held their own separate business session while the doctors were privileged to hear a panel discussion on "Recent Advances in the Treatment of Rheumatic Fever." The participants on this panel were James G. Janney, Jr., M.D., Chester P. Lynxwiler, M.D., and Donald W. Bussman, M.D., all of St. Louis.

This discussion was presented informally and was enhanced by audience participation. The program was jointly sponsored by the Missouri Academy of General Practice and the School of Medicine of St. Louis University.

In the afternoon, preceding this meeting, the Woman's Auxiliary of the Marion-Ralls-Shelby County Medical Society and the local Heart Association sponsored an open public meeting on rheumatic fever with the physicians from St. Louis University Medical School presenting the program.

Francis Burns, M.D., *Secretary*

THIRD COUNCILOR DISTRICT

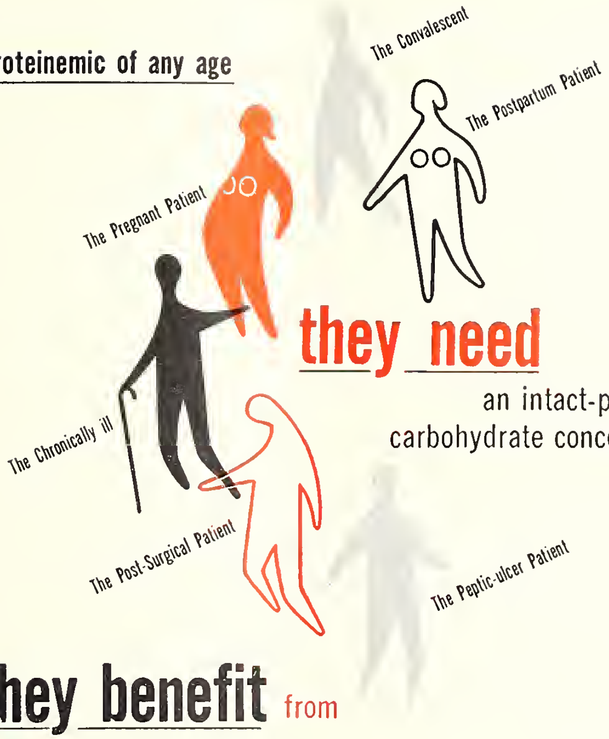
R. O. MUETHER, ST. LOUIS, COUNCILOR

St. Louis Medical Society

The St. Louis Medical Society held an interesting meeting on Tuesday evening, February 1, to which were invited St. Louis area interns, residents, medical students, dentists, public health workers, nurses and

Panel members who appeared on program.

The hypoproteinemic of any age


The Convalescent
The Postpartum Patient
The Pregnant Patient
The Chronically ill
The Post-Surgical Patient
The Peptic-ulcer Patient

they need

an intact-protein,
carbohydrate concentrate

they benefit from

Protinal*

NATIONAL

Micropulverized casein powder (61.25%), Carbohydrate (30%)
to maintain protein/carbohydrate equilibrium essential for tissue regeneration.

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COMPLETELY PALATABLE

VIRTUALLY FAT AND SODIUM FREE (Less than 0.03% Na / Less than 1.0% Fat)

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or chocolate flavors,
in bottles of 8 oz., 1 lb.,
5 lb., and 25 lb. containers.

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members of organized medicine. Some 350 persons accepted the invitation and were privileged to hear a panel discussion on "Corporate Aspects of the Practice of Medicine." The moderator of the panel was Dr. Robert Mueller, past president of the St. Louis Medical Society and of the Missouri State Medical Association.

The panel in action.

Approximately 350 attended the meeting.

Members of the panel and their subjects of discussion were: T. Hartley Pollock, Attorney at Law, "Legal Status of Hospital Practice in Missouri and Questions Related to Insurance Funds"; Carl A. Moyer, M.D., Bixley Professor of Surgery, Washington University School of Medicine, and Reverend Edward T. Foote, S. J., Regent, St. Louis University School of Medicine, "Current Trends in the Practice of Medicine in the University Hospital"; Carl F. Vohs, M.D., president, Missouri Medical Service, "Prepayment Plans for Medical and Hospital Care and Their Abuses"; C. Allen McFee, M.D., and George F. Hawkins, Jr., M.D., "Hospital Use of Insurance Funds From Indigent Patients."

Following the formal presentation by the panel, questions from the audience were received and discussed. There was every indication of keen audience interest in this important subject.

It was quite evident from the various opinions expressed during the meeting, that many were concerned about the practice of medicine in university clinics moving into the domain of the private practice of medicine. Some of the supporters of the university clinic idea argued that such practice is necessary for financial reasons to help defray the high cost of medical school operations.

The matter, of whether medical schools that practice medicine while teaching are engaging in corporate practice, was given considerable attention during the evening's discussions. It was pointed out that such activity on the part of medical schools is considered the corporate practice of medicine in some states and is barred by law. In other states, such practice is not barred by law on the basis that public interest takes precedence over any technical definition.

Even though no final conclusions were made at this meeting, it is felt that much was gained by bringing together representatives of medical schools and private practitioners.

It is contemplated that other meetings of a similar nature will be held from time to time.

George L. Hawkins, Jr., M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

J. LOREN WASHBURN, VERSAILLES, COUNCILOR

Audrain County Medical Society

A dinner meeting of the Audrain County Medical Society was held at the County Hospital, Mexico, Monday night, February 21.

The scientific program, under the auspices of the Missouri Academy of General Practice, was as follows:

George Hawkins, Jr., M.D., St. Louis, spoke on "The Emergency Treatment of Trauma of the Head and Back."

Vilray P. Blair, Jr., M.D., St. Louis, discussed "The Emergency Treatment of Fractures."

A number of physicians from adjacent counties were among the sixteen physicians present.

Thomas L. Dwyer, M.D., *Secretary*

Postgraduate Course at Missouri University

The fifth postgraduate session in the series of six, being offered at the Medical School at the University of Missouri in cooperation with the Missouri Academy of General Practice during the fall and winter months of 1955, was held at the University on Thursday night, February 17.

Some forty physicians and medical students were in attendance to hear the following program: "Practical Aspects of the Use of Liver Function Tests," William A. Sodeman, M.D., Professor of Medicine, University of Missouri; "Evaluation of Post-menopausal Bleeding," Clarence D. Davis, Professor of Obstetrics and Gynecology.

The final session of the series will be held at the University on March 17.

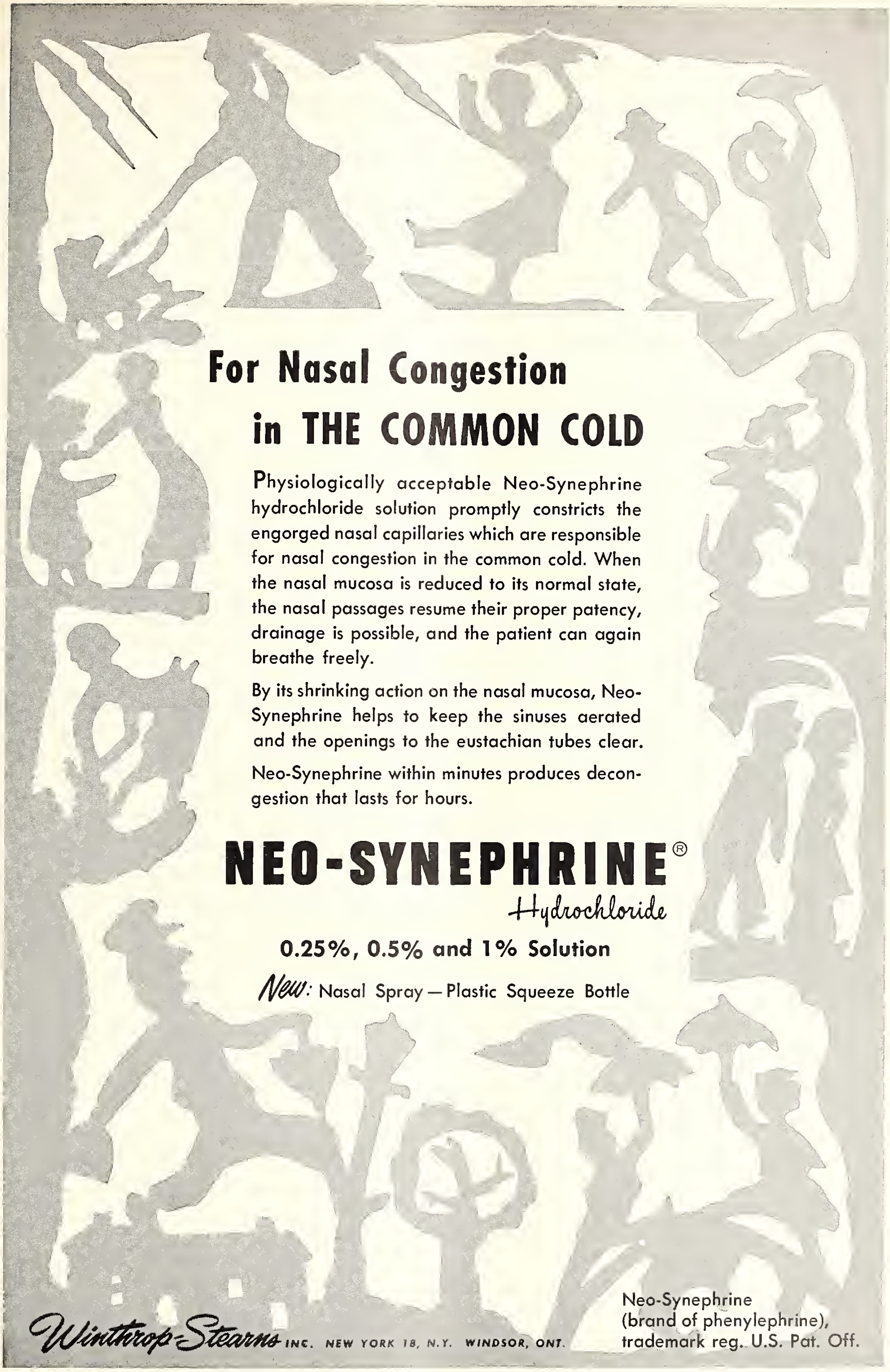
J. L. Washburn, M.D., *Councilor*

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

Henry, Johnson, Pettis, Saline and Adjacent County Medical Societies

A joint dinner meeting of the Henry, Johnson, Pettis, Saline and adjacent county medical societies was



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held Wednesday night, February 16, at the Fitzgibbon Memorial Hospital in Marshall.

Social refreshments were served, beginning at 6 p.m., followed by dinner and then the scientific program.

Gerald L. Miller, M.D., Kansas City, discussed "Obstetrical Emergencies"; Carroll P. Hungate, M.D., Kansas City, spoke on "What's the Score on Civil Defense?"

This program was sponsored by the Missouri Academy of General Practice and was attended by a good representation of physicians from the counties involved.

RAY HOLLINGSWORTH, M.D.,
Henry County Society,
Chairman for the Meeting

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Phelps-Crawford-Dent-Pulaski-Maries and Laclede County Medical Societies

A dinner meeting of the Phelps-Crawford-Dent-Pulaski-Maries and Laclede County Medical Societies was held at the Nelson Hotel, Lebanon, Thursday night, February 24.

The Ladies Auxiliaries were also in attendance. The scientific program for the evening, under the auspices of the Missouri Academy of General Practice, was presented by John L. K. Tsang, M.D., Springfield. Dr. Tsang discussed "Neurosurgical Principles as Applied to General Practice."

These two societies are presenting a formal request through Dr. J. H. Summers, Councilor, to the Council of the Missouri State Medical Association, for hyphenation.

M. K. UNDERWOOD, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Mineral Area County Medical Society

Robert W. Bartlett, M.D., St. Louis, presented the scientific program at the meeting of the Mineral Area County Medical Society at the State Hospital, Farmington, Thursday night, February 24. He gave an interesting and practical discussion on "Modern Treatment of the Common Forms of Goiter."

This program was under the auspices of the Missouri Academy of General Practice.

C. E. CARLETON, M.D., *Secretary*

Dunklin, Pemiscot, Butler-Ripley-Wayne, and the Semo County Medical Societies

A joint dinner meeting of the Dunklin, Pemiscot, Butler-Ripley-Wayne and the Semo County Medical Societies was held at the Cotton Boll Hotel, Kennett, on Tuesday night, February 15.

The evening festivities began with a social hour followed by dinner and then the program to-wit: J. W. Thompson, M.D., and R. M. Launch, M.D., both of St. Louis, presented a fine discussion on the subject "The Medical and Surgical Aspects of the Acute Abdomen."

A joint meeting had been held in November.

Both meetings were well attended.

Some thirty physicians from southeast Missouri attended the meeting.

This program was sponsored by the Missouri Academy of General Practice and, like all other programs under the auspices of the Academy, formal study credit toward academy requirements is given to all Academy members in attendance.

E. L. SPENCE, M.D., *Secretary*

DR. T. W. COTTON MEMORY HONORED

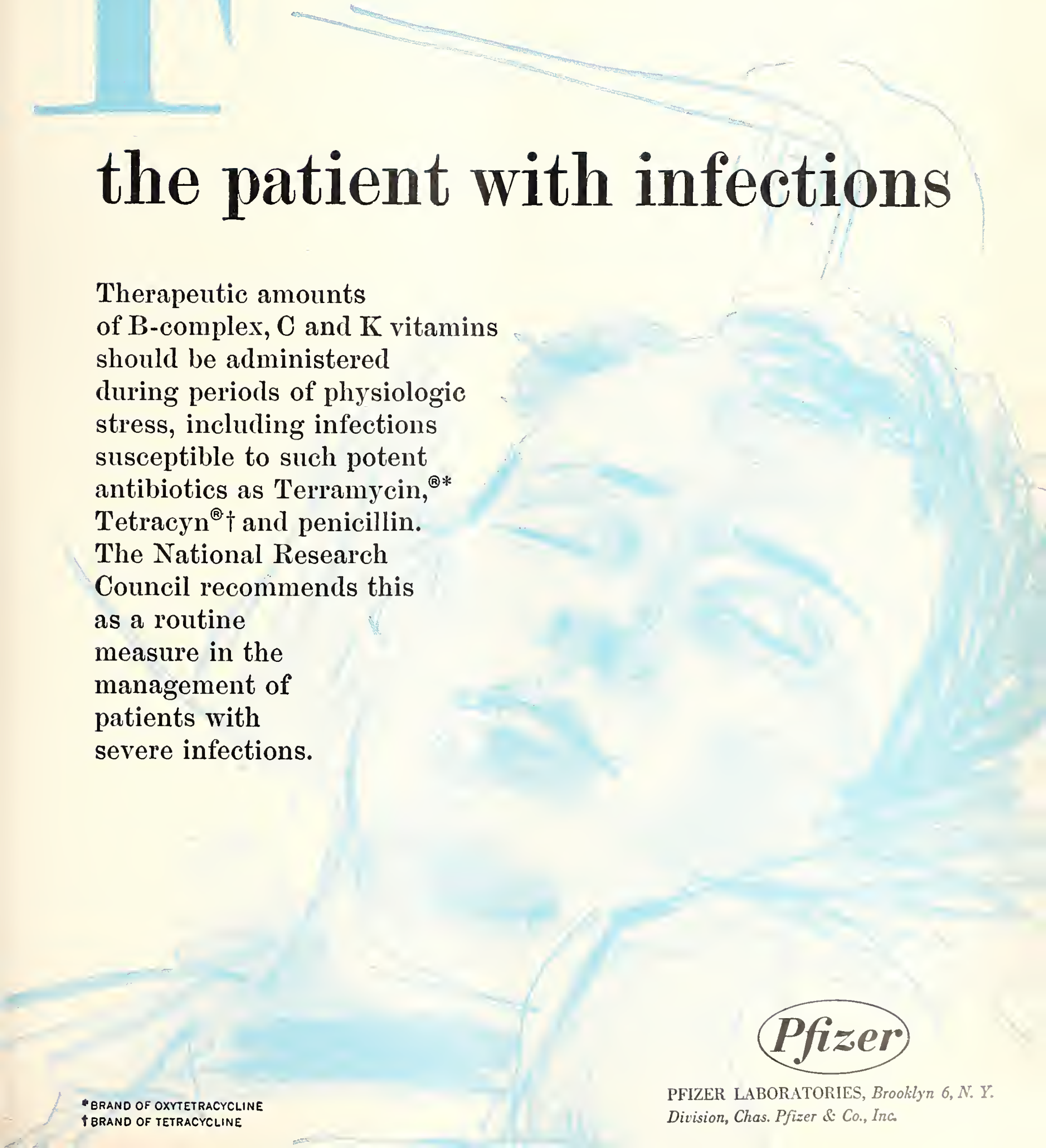
The following resolution was offered in the present 88th General Assembly of Missouri on Monday, February 28, at the request of Representative Walter T. Bollinger, Jr., Van Buren. It was adopted unanimously.

WHEREAS, the House of Representatives has learned with deep regret of the death of Dr. Tolman W. Cotton on February 6, 1955, at the age of eighty-six; and

WHEREAS, Dr. Cotton, a 33rd degree Mason has long been active in Masonic work in Missouri, serving terms as Grand Worthy Patron of the Eastern Star, and Grand Master of the Masonic Lodge of Missouri; and

WHEREAS, Dr. Cotton, as Grand Master of Missouri, laid the cornerstone of the present Missouri Capitol Building in 1915; and

WHEREAS, Dr. Cotton rendered great service to the medical profession, serving at one time as president



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of the Missouri State Medical Association, and further served his profession and the State of Missouri as a member of the State Board of Health; and

Whereas, Dr. Cotton worked tirelessly and unselfishly for the advancement of better roads in Missouri; and

Whereas, Dr. Cotton was a Sunday School teacher for fifty years, and, as such, became an inspiration to his community; now therefore be it

Resolved, that the House of Representatives express its heartfelt sympathy in the death of Dr. Cotton; and be it further

Resolved, that the Chief Clerk of the House be instructed to send copies of this resolution to the family of Dr. Cotton, Mrs. Fannie Cotton, Van Buren, his wife, Dr. Thelma Buckthorpe, Sikeston, his daughter, and Mr. George S. Cotton, Van Buren, his son.

History in the Making

Many Missouri physicians saw the closed circuit "Videclinic" television program telecast on February 9, produced and sponsored by Smith, Kline and French Laboratories in cooperation with the American Medical Association and local and state medical societies.

Those who were present were thrilled by the remarks of President Dwight D. Eisenhower and Dr. George F. Lull, Secretary and General Manager of the American Medical Association. Believing that all members will be interested in their remarks, they are presented.

The scientific program was an amazing television presentation which brought a new type of postgraduate education to an audience in thirty-two cities from coast to coast. Distinguished physicians from New York, Boston, Cleveland, Minneapolis, Chicago and New Orleans participated in the program.

Remarks by President Eisenhower

It is a privilege to greet you tonight and to express my gratification at the purpose of your separate, but united meetings from coast to coast. Your program tonight, as it has been described to me, is another example in our society of the collaboration between free enterprise and pure learning—an instance in which business and the medical profession work together for the common good.

If the annual toll from coronary artery disease were revealed to the American people as a casualty list from the battlefield the effect would be one of national shock and a demand that something be done. That something is being done in such programs as the one tonight. It is significant and encouraging.

You, the physicians of America, are linked in this enterprise by a bond far stronger than the cable of a television network. Your bond of union is a common and selfless aim. Your principal motives are, first, a concern for the welfare of your patients and, second, that restless curiosity, that hunger for knowledge of better ways which is the hallmark of the man of science.

Our way of life provides the climate in which the chronic questioner is free to rove, to doubt, to explore in the endless search for new and fuller answers. Every assistant in a laboratory, every researcher, every medical student, every specialist, every family doctor is a participant in this search—a search which has added twenty-five years to the American life span within the memory of many of you in this audience.

These new years of expectancy have been a bonus beyond price added to the wealth of our Republic. For them, we, your fellow Americans, owe you our grateful thanks.

A nation's strength is directly affected by its people's health. In that light we must strengthen and support those agencies of government which are concerned with the problems of national health.

Yet, the role of government in these matters must always be secondary and supplementary. The first responsibility lies with the community determined to foster good health and to provide well for the ailing and the injured; with the scientist as he works in freedom toward goals of his own choosing, and with the physician who brings his healing ministry, not to the state or to the mass of people as such, but always to some man, woman or child—some individual human being worthy of his dedicated care.

God speed you in your mission!

Remarks by Dr. George F. Lull

A few minutes ago we watched a distinguished physician in the arena of the Ether Dome in Massachusetts General Hospital. As he stood there in that historic chamber, Dr. Paul White was not alone. With him, in spirit, were the countless generations of physicians, students and observers who have sought and shared medical knowledge. And tonight—thanks to the modern miracle of television—it was possible for us to be there too, right in the front row.

Physicians have always worked and shared in the search for new facts, new technics, new skills. They have relayed their knowledge through medical journals and books, in lecture rooms, at medical meetings, in amphitheaters like the Ether Dome, and in many other ways. Tonight, however, by virtue of closed-circuit television, we have been able to break through the limitations of time, distance and seating capacity. The amphitheater has been brought directly to you physicians in your thirty-two home communities from coast to coast.

The learning process always has been a lifelong task for the conscientious physician. During the last thirty or forty years, with the growing complexity of modern medicine, that task has become increasingly difficult. As a result, the medical profession today is giving more and more attention to the problem of how to improve and extend postgraduate education. New discoveries and developments are coming forth at an accelerated rate each year. How to bring them to the attention of all physicians is now the subject of widespread thinking, discussion and experimentation.

The producers of tonight's program have undertaken a new pioneering experiment in the field of postgraduate medical education. Merging the science of medicine and the science of electronics, they have shown how medical knowledge can be projected directly into the home communities of practicing physicians.

The American Medical Association has been happy to cooperate in the presentation of this program. We salute its distinguished participants—those on the panel here in New York, and those who discussed this important subject from their laboratories, consulting rooms and hospitals in Boston, Cleveland, Chicago, Minneapolis and New Orleans. As to the Smith, Kline & French Laboratories, we have had previous reason to applaud them for their public spirited contribution of color television programs at our annual and clinical

(Continued on page 318)

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Bumbalo, T. S., Gustina, F. J., and Oleksiak, R. E.: J. Pediat. 44:386, 1954.

White, R. H. R., and Standen, O. D.: Brit. M. J. 2:755, 1953.

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Brown, H. W.: J. Pediat. 45:419, 1954.

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Division of Health

James R. Amos, M.D.

The 1955 Poliomyelitis Immunization Program

A report on the effectiveness of Salk's poliomyelitis vaccine is expected early in April. If the vaccine is proven to be of value, it will presumably be licensed soon thereafter.

In order to maintain vaccine production and to have it ready for immediate use this spring if it is licensed, the National Foundation for Infantile Paralysis is stockpiling the vaccine. Plans for the distribution and administration of this vaccine were discussed by representatives of the National Foundation, the American Medical Association, the American Academy of Pediatrics and others. The consensus of the meeting was reported as follows:

1. That if and when licensed by the National Institutes of Health, the vaccine will be supplied by the National Foundation to state health officers in amounts sufficient to provide for the vaccination of

(a) Children who participated in the vaccine field trial in 217 field trial areas in the United States in 1954, but who did not receive vaccine at that time.

(b) All children enrolled in the first and second primary grades of all public, private and parochial schools in the continental United States, Alaska and Hawaii in the spring term of 1955.

2. The plan of administration of the vaccine in any state or territory will be the administrative responsibility of the respective state or territorial health officer and will be worked out by him in cooperation with the state or territorial medical society and state or territorial education officials.

3. The 1955 vaccine program has been initiated by the National Foundation for the purpose of making possible early and widespread application of a newly established preventive measure against paralytic poliomyelitis; after completion of this program, the National Foundation will not participate in the production, distribution or administration of poliomyelitis vaccine.

4. The children in the first and second grade of primary schools were selected for the program because of high incidence of paralytic poliomyelitis in this group and their accessibility as organized units within the schools, keeping in mind the limitations on the amount of vaccine to be available for this program.

5. It is expected that additional vaccine, equivalent or greater in amount than that contracted for by the National Foundation, will be obtainable through usual commercial channels for the use of private physicians for their patients.

6. Vaccine for use in 1955 will be administered on the same dosage schedule as was followed in the 1954 field trial; namely, 1 cc. of vaccine in each of the three doses, given intramuscularly, the second inoculation one week after the first and the third inoculation four weeks after the second.

7. Administrative procedures for the giving of the vaccine will be as simple as possible and will not require extensive record keeping. Except in those states which wish and are in a position to conduct follow-up studies, no extensive nation-wide evaluation such as was done in the 1954 field trial is contemplated.

8. Upon request from state health officers, the National Foundation will supply educational and other printed materials for use in the conduct of the vaccination program and will provide local cooperation and assistance through its Chapters in all counties, as requested by local health authorities.

At a meeting with the Infant Care Committee of the Missouri Medical Association it was agreed that the administration of the vaccine program in Missouri should adhere to the general outline given above. The printed informational material and record forms will be made available. Carrying out this program to the local level may well involve the coordinated efforts of physicians, nurses, school authorities, local National Foundation Chapters, P.T.A.'s and others. Physicians are particularly vital to its success, and they can be of great service by responding when called upon for help.

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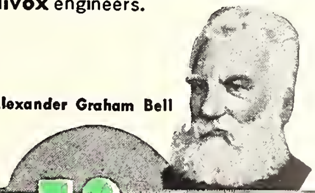

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News From the Medical Schools

SAINT LOUIS UNIVERSITY

Dr. Charles B. Huggins, professor of surgical urology at the University of Chicago School of Medicine delivered the tenth annual Hanau W. Loeb Lecture at Saint Louis University School of Medicine at 5 p.m., Thursday, February 24. The Lectureship is sponsored by the Phi Delta Epsilon Medical Fraternity of Saint Louis University.

Dr. Huggins' topic was "Relationship of the Steroids to Cancer." He is noted for his research in the use of steroids as a diagnostic aid in prostate cancer.

Dr. Huggins attended Harvard where he was awarded his M.D. in 1924. He received his Masters of Science degree at Yale in 1947 and his Doctors of Science from Washington University in 1950. Following his internship in Surgery at the University of Michigan from 1924 to 1926, he joined the faculty of the University of Chicago School of Medicine, where he has been a professor of surgery since 1936.

He has been director of the Ben May Laboratory for Cancer Research since 1951 and is president of the Worcester Foundation of Experimental Biology. He received the Charles L. Meyer Award for Cancer Research from the National Academy of Science in 1943; the American Urological Association Award for Research on Male Genital Tract in 1948; the Francis Amory Award for Cancer Research in 1948; the A.M.A. gold medal awards for research in 1936 and 1940; the American Cancer Society Award in 1953 and the American Pharmaceutical Manufacturers Association Award in 1953.

The School of Medicine faculty and the medical fraternity attended a dinner at the Kingsway Hotel honoring Dr. Huggins following the lecture.

The lectureship was established in 1946 in honor of the late Dr. Hanau W. Loeb, who served as dean of the School of Medicine from 1914 to 1927.

UNIVERSITY OF MISSOURI

Appointments. Dr. Thomas H. Alphin, formerly Assistant Director, Washington Office, American Medical Association, assumed his duties as Associate Professor of Anatomy and Assistant Dean of the University of Missouri School of Medicine on March 1. Dr. William T. Ellis, currently in his fifth postgraduate year of Obstetrics and Gynecology, Boston City Hospital, Boston, Massachusetts, assumed his duties as Assistant Professor of Obstetrics and Gynecology on March 1.

Lectureships. Dr. Norman Conant, Professor of Mycology and Associate Professor of Bacteriology, Duke University School of Medicine, Durham, North Carolina, addressed an Assembly of Faculty and students on January 14, on the topic of "Systemic Mycoses." Dr. Isaac L. Shechmeister, Associate Professor of Bacteriology, Washington University School of Medicine, St. Louis, addressed the Faculty and student body on "The Role of Infections in Radiation Injuries" on February 9. Dr. Frederick C. Robbins, 1954 Nobel Prize Winner in Medicine and Physiology, and currently Professor of Pediatrics, Western Reserve University School of Medicine, Cleveland, Ohio, addressed the Faculty and student body of the School of Medicine and the School of Nursing on February 21 on "The Present Status of Poliomyelitis Vaccination." On the same day Doctor Robbins gave a lay address in Columbia on the same topic.

Postgraduate Activities. On January 13, Dr. Robert L. Jackson, Professor and Chairman of the Department of Pediatrics, addressed the Chariton-Macon-Monroe-Randolph County Medical Society in Moberly. On January 17-20, Miss Dorothy L. Vorhies, Associate Professor of Dietetics and Director of the Dietary Department, University Hospitals, attended a Weight Control Colloqium conducted at Iowa State College, Ames, Iowa. On January 22, Miss Vorhies attended the Northwest Hospital Area Council meeting in Kansas City. On January 15-21, Dr. W. R. Hepner, Jr., Associate Professor of Pediatrics, attended the National Conference on Retrolental Fibroplasia in New York City, and, while there, visited several pediatric departments in New York. On January 18-25, Dr. Robert L. Jackson, Chairman of the Department of Pediatrics, attended the third Postgraduate course on Diabetes and Basic Metabolic Problems, as well as the Council meeting conducted by the American Diabetic Association in Philadelphia. On January 19, Dr. W. A. Sodeman, Professor and Chairman of the Department of Medicine, and Dr. C. D. Davis, Professor and Chairman of the Department of Obstetrics and Gynecology, participated in the monthly postgraduate program conducted by the University of Missouri School of Medicine, and the Greene County Medical Society in Springfield. On January 23, Dr. Sodeman addressed the Missouri State Medical Secretaries and Assistants Society in Joplin, and the following day delivered a lay address on Cardiac Disease in Joplin under the sponsorship of the Joplin Chapter of the Missouri Heart Association. On January 27-31, Dr. John T. Logue, Cardiac Fellow in Medicine, attended the Southern Society of Clinical Research and the American Federation for Clinical Research in New Orleans. On February 3-6, Dr. Dallas K. Meyer, Associate Professor of Physiology, attended the Central Regional Conference on Premedical and Predental Education in Chicago under the sponsorship of Alpha Epsilon Delta. On February 5-8, Dr. Roscoe L. Pullen, Dean of the School of Medicine, and Dr. C. D. Davis, Chairman of the Department of Obstetrics and Gynecology, attended the Annual Congress on Medical Education and Licensure of the American Medical Association in Chicago. On February 10, Doctor Sodeman addressed the Chariton-Macon-Monroe-Randolph Medical Society in Moberly. On February 11, Dr. Davis addressed the Institute on Maternal Health of the Division of Health of Missouri in Jefferson City, followed by an address by Doctor Jackson to the same group on February 12.

Grants. Funds for six medical student research grants have been received recently: The United States Public Health Service has awarded $1728.00 to the Department of Physiology and Pharmacology for the employment of four medical students pursuing research in that department; and the National Foundation for Infantile Paralysis has awarded $800 to the Department of Microbiology for the employment of two medical students pursuing research in that department during the summer months of 1955.

WASHINGTON UNIVERSITY

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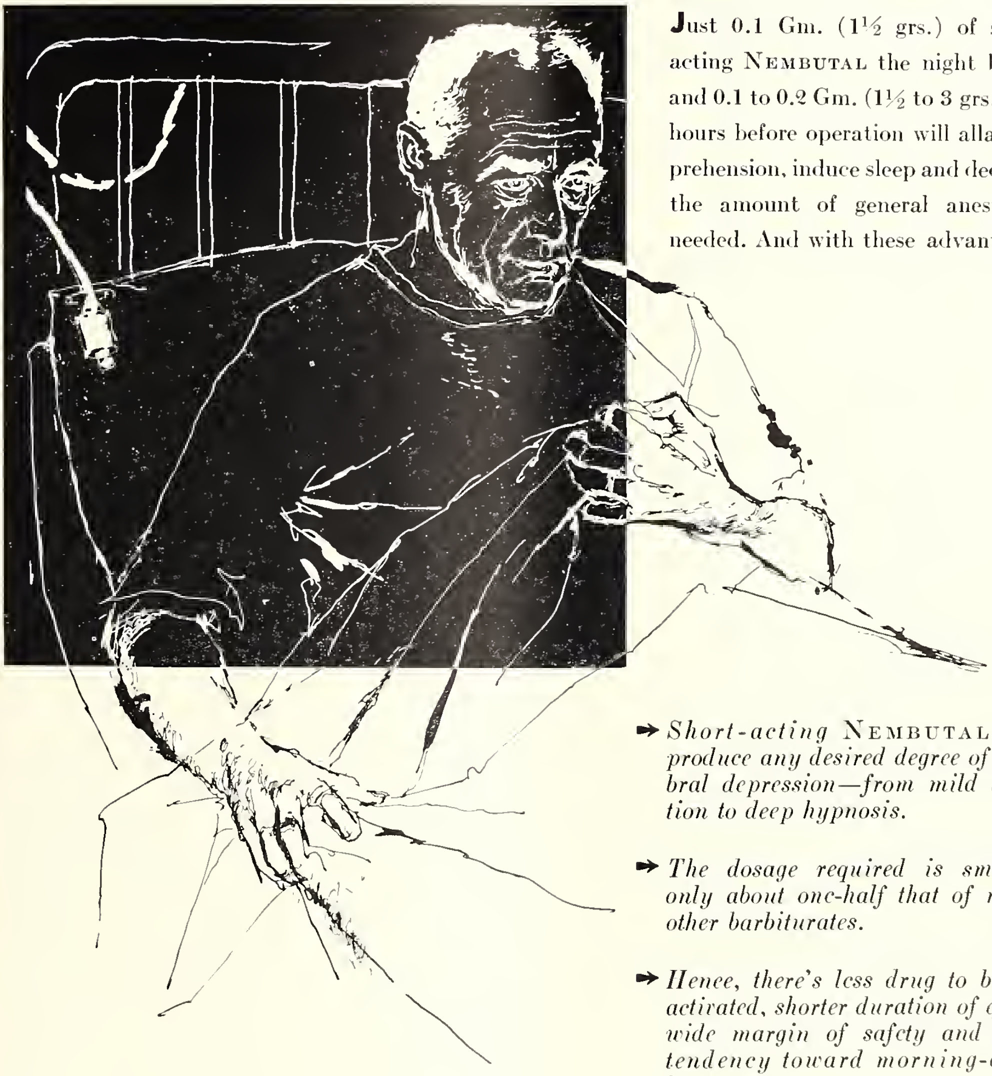

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surgical treatment of epilepsy, was in St. Louis February 8 at the invitation of the St. Louis Society of Neurology and Psychiatry. He discussed "Cerebral Pathology and Epileptic Seizures" at a meeting of the Society. Earlier in the day Dr. Penfield talked to students and staff of Washington University School of Medicine at a clinical and pathologic conference. Dr. Penfield is professor of neurology and neurosurgery at McGill University, Montreal, Canada, and director of the Montreal Neurological Institute.

Washington University's School of Nursing will continue its accredited diploma program only until all present students have completed their course and have received their diplomas from the university. "Washington University will concentrate on graduate nursing education for the time being. This important program is attracting highly-qualified nurses to the St. Louis area and is giving them additional training," Chancellor Ethan A. H. Shepley of Washington University said recently. Meanwhile, Barnes Hospital will begin operation of a three-year diploma course in nursing in July (1955) and is now enrolling students.

A grant of $8,400 has been awarded by the National Science Foundation to support research of Dr. Roy R. Peterson, instructor in anatomy in the School of Medicine. Entitled "Cytology and Secretory Mechanisms in the Adenohypophysis," Dr. Peterson's research involves the study of the structure and functions of the cells of the pituitary gland and the manner in which they secrete hormones, which regulate the physiologic functions of the body. The grant is for a period of two years.

The first Missouri regional meeting of the American College of Physicians was held February 19 at the University of Missouri in Columbia. Dr. William A. Sodeman, professor of medicine at the University of Missouri and general chairman for the meeting, presided at the morning session. Presiding at the afternoon session was Dr. Carl V. Moore, dean of Washington University School of Medicine and governor of Missouri for the American College of Physicians. Scientific papers were presented by members of the College from Columbia, Kansas City and St. Louis. Members of the College from over the state attended. Washington University staff members who participated in the program were: Dr. William J. Harrington, assistant professor of medicine; Dr. Elisha Atkins, instructor in medicine; Dr. W. Barry Wood, Jr., Busch professor of medicine and head of the department of internal medicine; Dr. Sol Sherry, associate professor of medicine; Dr. Paul O. Hagemann, assistant professor of clinical medicine, and Dr. Joseph W. Noah, instructor in clinical medicine.

Four research papers will be presented at a meeting of the Washington University Medical Society April 20. Dr. Henry G. Schwartz, professor of neurologic surgery, will discuss "Gasserian Gangliolysis for Trigeminal Neuralgia." A paper entitled "Experimental Studies of Trigeminal Nerve Potentials," prepared by Dr. Robert B. King, assistant professor of neurologic surgery, and Dr. John N. Meagher, fellow in neurologic surgery, also will be presented.

Dr. Jeffrey D. Lever, visiting instructor and research assistant in anatomy, will report on "Electron Microscopic Observations on the Adrenal Cortex"; and Dr. William B. Seaman, associate professor of radiology, will give "A Preliminary Report of Cancer Therapy With the Betatron."

Dr. Robert J. Glaser, assistant professor of medicine and assistant dean, and W. Bahlmann Parker, registrar of the School of Medicine, represented the medical school at the 51st Annual Congress on Medical Education and Licensure February 6-8 in Chicago.

Dr. Lauren V. Ackerman, professor of surgical pathology, was a guest speaker at a postgraduate symposium on carcinoma of the breast sponsored by the Oklahoma Chapter of the American College of Surgeons, the Oklahoma Association of Radiologists and the Oklahoma Association of Pathologists. The symposium was held February 18 and 19 in Oklahoma City to discuss all aspects of the early diagnosis and surgical treatment of breast cancer.

Dr. James Barrett Brown, professor of clinical surgery, presented a paper on "The Use of Post-mortem Homografts in Severe Burns and Final Rehabilitation by Plastic Surgery" at a joint meeting of the Southeastern Surgical Congress and the Atlanta Graduate Medical Assembly February 21-24 in Atlanta.

Capt. Roald N. Grant, United States Navy Medical Corps and chief of surgery at the Naval Hospital, St. Albans, Long Island, spoke and showed a movie on "Front Line Surgery in Korea" to surgery students of Washington University January 24. Capt. Grant, surgical consultant for the Reinforced First Marine Division in Korea in 1952 and 1953, was in St. Louis to address a joint meeting of the United States Naval Reserve, Medical Company 9-1; and the 374th General Hospital Unit of the Department of the Army.

Filmed under Capt. Grant's direction during actual combat, the movie depicted new first aid surgery on the battlefield, the method of handling front line casualties and the preparation of patients for evacuation to hospitals further behind the lines.

Seven staff members of Washington University School of Medicine participated in a four day meeting of the American College of Surgeons February 21-24 in Cleveland. Dr. Carl A. Moyer, Bixby professor of surgery and head of the department, discussed "Electrolytes"; Dr. Thomas H. Burford, professor of thoracic surgery, reported on "Traumatic Injuries of the Diaphragm," and Dr. Justin J. Cordonnier, professor of urology, spoke on "Transplantation" at a symposium on transplantation of ureters.

Dr. Harvey R. Butcher, Jr., instructor in surgery, reported on "A Study of the Electrical Activity of Intact and Partially Mobilized Human Ureters." A paper entitled "Silicones as Subcutaneous Prostheses Laboratory Investigations," prepared by Dr. James Barrett Brown, professor of clinical surgery; Dr. Minot P. Fryer, assistant professor of clinical surgery, and Dr. Milton Lu, assistant in plastic surgery, also was presented.

A capping ceremony for students of Washington University School of Nursing was held February 25. Miss Louise Knapp, director of the School of Nursing, conferred the caps. She was assisted by Miss Ruby Potter, assistant director.

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The Journal of the Missouri State Medical Association

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Gallbladder Surgery, Ten Hours, June 27
Thoracic Surgery, One Week, June 6
Esophageal Surgery, One Week, June 13
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Curiosa et Trivia

William B. McCunniff, M.D.

Of about 7,000 physicians in New York County, 1,196 received tickets for parking violations through November, 1954. As might be expected, 62 physicians accounted for 272 arrests. In other words, in parking trespasses (as in other indiscretions) 23 per cent of the violations were committed by 1 per cent of the physicians in the county.

Nearly half of 500 business executives given company paid checkups at a midwestern medical center had previously undiagnosed and unsuspected abnormalities. Only about one fourth had conditions not requiring immediate medical attention.

Among other firsts for which he is responsible, Benjamin Franklin, in 1791, brought to the U. S. its first bathtub. No competitor for its present day descendants with piped-in water, the tub of hammered copper was shaped like a slipper with the open end above the heel. A charcoal burner beneath the heel kept the water at the correct (it was hoped) temperature.

The fall-out of radioactive dust and moisture from one H-bomb could be fatal within twelve minutes to every exposed person in a 250-square mile area. The danger could include as much as 4,000 square miles.

Capsule Clinics

Irving A. Wien, M.D.

- Intestinal obstruction occurred from a Meckel's diverticulum by ulceration of a peptic ulcer, perforation and edema with compression and angulation, by attachment of the diverticulum and formation of a foramen so that a loop of bowel prolapsed in, and by being the leading point in an intussusception. Chance, D. P., et al: Proc. Staff Meet. Mayo Clin. **20**, Oct. 13, 1954.

- Pediatric surgery as a specialty is constantly fascinating and tremendously rewarding. It is broad enough to interest the surgeon, difficult enough to satisfy his ambition, and new enough to stimulate his imagination. Potts, W. J.: JAMA **157**, Feb. 19, 1955.

- Of 457 patients addicted to Meperidine (Demerol) hydrochloride nearly 50 per cent were physicians, nurses, or other persons closely related to the medical profession. Rasor, R. W., and Creeraft, H. J.: JAMA **157**, Feb. 19, 1955.

- In cancer of the thyroid gland high voltage roentgen ray therapy is of great value postoperatively and in cases of inoperable tumor. DeCourcy, C. B.: J. Internat. Col. Surg. **12**, Oct., 1954.

- The most common causes of anuria are: transfusion reactions, surgical shock, burns, crushing injuries, and ingestion of sulfonamide drugs. Ewell, G. H.: J. Internat. Col. Surg. **12**, Oct., 1954.

- Hydatidiform mole and chorio-epithelioma invariably follow pregnancies; hence one cannot dismiss the problem of irregular uterine bleeding without considering these unusual growths. Wharton, L. R.: Gynecology Including Female Urology, W. B. Saunders Co., Philadelphia, 1953.

- The most certain cure for primary dysmenorrhea is childbearing, hence conservative therapy is definitely indicated in young women for this symptom. Wharton, L. R.: Gynecology Including Female Urology, W. B. Saunders Co., Philadelphia, 1943.

- Hyperparathyroidism (von Recklinhausen's disease) is characterized by: elevation of serum calcium, reduction in plasma phosphorus, increase in urinary calcium, reduction in muscle tonicity, and decalcification of bones with bone deformities, fractures, and cysts. Riley, G. M.: Essentials of Gynecologic Endocrinology, Caduceus Press, Ann Arbor, Michigan, 1952.

- Of the ovarian tumors the granulosa cell and the theca cell tumors are feminizing while the arrhenoblastoma and adrenal rest tumors are masculinizing. Rile, G. M.: Essentials of Gynecologic Endocrinology, Caduceus Press, Ann Arbor, Michigan, 1952.

- The spinal cord ends between the 1st and 2nd lumbar vertebrae, while the subarachnoid space and the contained cerebral-spinal fluid end at the 1st and 2nd sacral vertebrae. Grant, J. C. B.: Atlas of Anatomy, 2, Williams and Wilkins Co., Baltimore, 1943.

Entered as second-class matter, February 18, 1925, at the post office at Fulton, Missouri, under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917. Publication Office: 1201-5 Bluff Street, Fulton, Missouri. Editorial Office: 634 N. Grand Ave., St. Louis 3, Mo. Subscription Price: $3.00 Per Year. Printed by The Ovid Bell Press, Inc., Fulton, Missouri.

Missouri Academy of General Practice

KENNETH GLOVER, M.D.

Single Licensure Bill for Missouri Practice of Medicine

The single licensure bill for the practice of medicine and the healing arts for Missouri, has been a subject for discussion among medical men for some time. This bill, in short, makes it mandatory that every practitioner of the healing arts have the same examination before being licensed. That means that graduates of schools of medicine obtaining the M.D. degree and those of schools of Osteopathy must pass the same examination. This examination will be made and graded by representatives of the two schools. At present time the plan is for seven members, five members chosen from M.D.'s and two members to be chosen from Osteopaths. The bases for this division depends upon the number in practice in Missouri. There are roughly 5,000 M.D.'s and 1,500 Osteopaths practicing at this time.

Before this bill was presented to the legislature the Ozarks Medical Society Area as well as Greene County and several other Counties in the state had an informal meeting with members of the legislature, both Senators and House, to discuss the bill. Here the Presiding Officer was our counselor, Dr. Sewell. At this time Senators and Representatives asked questions about the bill and were asked questions about their reaction to it. Of course it was premature in that they had not had a chance to study it, but their questions were somewhat notable. One of these was "are the M.D.'s ready for such a bill?" Another was "how will your medical group feel toward this bill after some hundred and fifty-four members of the legislature correct it and amend it and otherwise rearrange it?" The answer of course to the first question was not definite. We could not say how some of the men who have some ill feeling toward the Osteopaths would accept it. We do not know, time will only tell that. The answer to the second question was rather simple, if the legislature changed it so that it failed to accomplish the purpose for which the bill was written, the bill

(Continued on page 388)

Crossroads Comment

PETER V. SIEGEL, M.D.

Dear Aunt Helen:

You know I really dont mind so much you giving some of my letters to you to the Editor but once in a while it gets sort of embarassing. Especially when someone asks who the heck Im gonna give heck to next—or when someones toes start to hurting and they cant keep from showing it. But ther are many times when I feel sort of humbled by the comments and its a really good feeling down inside.

Since my premedic days as a panhandler in one of the local hospitals in Columbia I have known one of the Patriarchs of Missouri Medicine who like myself has always practiced out at the Crossroads. At first I was awed by him, by the fact that he would let me dog his tracks and even payed any attention to me. Next I learned to look to and admire him for the man and physician that he is. Now I can count on him as my friend.

He greeted me at a recent meeting and said my letter to you was the first thing he looked at in MoMed and that sometimes I came near to telling the truth. I asked him how he could tell when I was or when I wernt telling the truth. He just chuckled and remainded me that he had been out at the Crossroads many a moon longer than I had.

All of which brings up a very pregnant point. Just what the heck is the truth. Recently it was very aptly demonstrated that too many of us know the truth about a lot of things but for one reason or other just wont admit it and go on record for the public.

A ferinstance. All the experts tell us that most malpractice (nasty word) suits are borned, or at least fertilized, in doctors offices. We all know those what can drop a hint like a ton of brick that such and such surgery wasnt necessary. That after all there were specialists available. We all know some that build and keep the OR busy for fifty percent. I do but they aint offered it to me since I know better. But suppose I wanted to do something about it I couldnt get very many who were in a position to help admit the truth. There is yet the breed that has reached the point of being untouchable.

But my friend, the Patriarch, knows what I am talking about. Except I think he has mellowed with age and is now tolerant of them—and me.

Sometimes I think it would be a good idea to live in a house by the side of the road and just watch the world go by.

Your country nephew,
PETE

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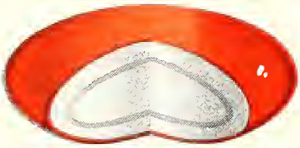

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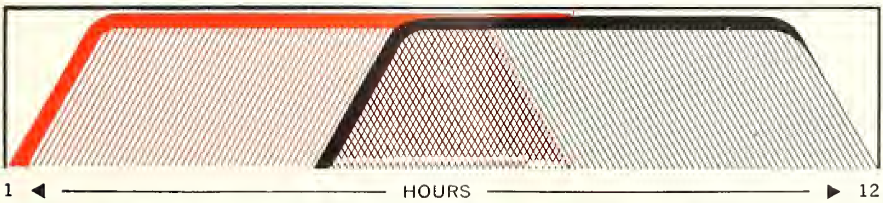

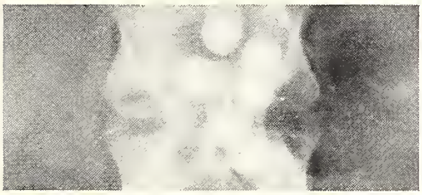

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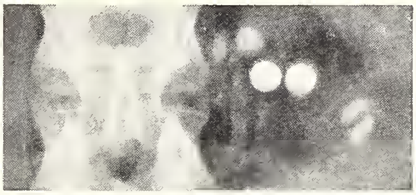

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Woman's Auxiliary

Mrs. Frank B. Leitz, *President*

As this goes to press, the thirtieth annual meeting of the Woman's Auxiliary to the Missouri State Medical Association is history.

Reports from officers, chairmen and county auxiliary presidents indicate that the 1,663 members, under the gentle, efficient leadership of Mrs. W. E. Martin have accomplished much toward carrying out the object, the reason for existence, of the Auxiliary: "The object of this Auxiliary shall be to extend the aims of the Missouri State Medical Association, which look to the promotion of public health and to the advancement of health education; to fulfill such functions as may be needed from it at medical meetings; and at all times to stimulate the spirit of co-operation and fellowship through the common bond of friendship."

There are new names in the lists of officers and chairmen for the coming year, but the object remains the same.

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Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

The third city in the state, St. Joseph, will entertain the Association this month, it being the first opportunity for the members in St. Joseph to be our host since 1902. It was at St. Joseph that the existing scheme of organization was proposed and the constitution and by-laws introduced to be adopted in 1903 at Excelsior Springs. By this change the membership was increased from 269 in 1902 to 1,128 in 1903, while today we have 3,057 members.

The State society mourns the death of Dr. William Grant Moore, on January 28, 1915. This illustrious physician was president of the Missouri State Medical Association, 1903-1904.

L. R. Weir was convicted in the circuit court at Plattsburg, April 5, and fined $100, for practicing medicine without a license. The Clinton County Medical Society prosecuted the case.

Dr. George Smith, formerly Associate Professor of Pathology of Washington University, took charge of the Barnard Free Skin and Cancer Hospital, April 1, as medical director of the hospital, and director of the Research Department.

The Seventh Pan-American Congress will meet in San Francisco, June 17-21, inclusive. It assembles pursuant to invitation of the president of the United States issued in accordance with an act of Congress approved March 3, 1915.

TWENTY YEARS AGO

On April 8, the eightieth birthday of Dr. William Henry Welch, Baltimore, dean of American medicine, was celebrated by all the civilized world. As the influence of Dr. Welch has radiated throughout the world, so his eightieth birthday was an event of world-wide recognition. When that remarkable man, Daniel Coyt Gilman, began to select his new faculty for Johns Hopkins University he picked out Dr. Welch as the man to help him develop a medical school which was to set new standards. Shortly thereafter, those other three eminent men, Osler, Halsted and Kelly, were asked to join Dr. Welch. He first proposed the so-called full-time system and advised that it be given a fair trial to see if it might not be a way of correcting evils that had crept into some American medical schools.

In 1910 he was elected president of the American Medical Association.

Dr. M. G. Seelig, St. Louis, professor of clinical surgery at Washington University School of Medicine, was appointed one of a committee representing the American College of Surgeons to observe the Coffey Humber anti-cancer experimental treatments in San Francisco and Los Angeles. Dr. Seelig went to California early in April with the committee.

The Board of Curators of the University of Missouri relieved Dr. Stratton D. Brooks of the presidency of the State University by giving him a leave of absence until December 31, 1930, and in his place elected Dean Walter Williams, of the School of Journalism. Newspapers have paid him this tribute: "There is but one Dean Williams. Dean he is by title, Dean by service and Dean by seniority in that service, and Dean by right he will remain."

A blackmailing syndicate preying upon physicians of Philadelphia was disclosel recently. One physician charged that he had paid $11,500 to protect his professional reputation although he denied being guilty of any illegal or unethical practices.

Underworld gangsters aided by lawyers obtained huge sums from physicians by concocting fraudulent evidence against them.

TEN YEARS AGO

Dr. Arthur S. Bristow, Princeton, President-Elect of the Association, was installed as President at a meeting of the Council April 21 and 22. He succeeded Col. Curtis H. Lohr, St. Louis, now serving as commanding officer of the Seventieth General Hospital overseas and in whose place Dr. Robert Mueller, St. Louis, served as Acting President of the Association. The Annual Session including the House of Delegates was canceled in compliance with the rulings of the Office of Defense Transportation.

Dr. Wallis Smith, Springfield, has been elected president of the Springfield Chamber of Commerce for a second term.

A lectureship in honor of the late Hanau W. Loeb, former Dean of St. Louis University School of Medicine, was presented to the school by the Alpha Pi Chapter of Phi Delta Epsilon at a dinner meeting on April 9.

Dr. E. F. Hoctor, Farmington, was the guest speaker at a regular weekly meeting of the American War Dads of Flat River recently.

Col. B. J. Macauley, Poplar Bluff, led an ambulance unit behind enemy lines to help liberate the 513 allied prisoners on Luzon.

Lt. Comdr. Claude R. Bruner, Columbia, has been awarded the Legion of Merit in recognition of medical services in the invasion of Saipan.

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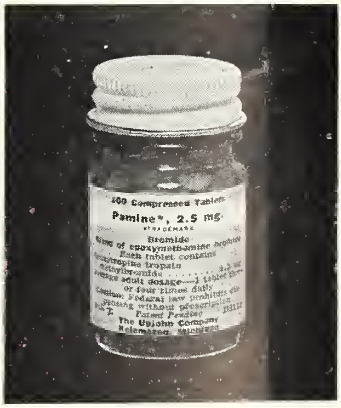
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Progress Notes of Prepayment Plans

Kansas City Blue Cross-Blue Shield

An area wide nongroup enrollment campaign will be conducted by Kansas City Blue Cross and Blue Shield May 1 through 15, for membership effective July 1, 1955.

In the Kansas City Plan there is no age limit for enrollment nor is it necessary that a person be employed. An application card and a brief statement of health are required.

Enrollment stations in all Blue Cross member hospitals will make it easy for the visiting public to pick up application forms. Also, participating physicians of Blue Shield cooperate in nongroup enrollment campaigns by sending out advance notice of the open period with their statements to patients, and by making applications available at their offices.

Kansas City has been using the limited open period method of nongroup enrollment since 1950. Carefully maintained actuarial records have proved that the older age group can be protected through this type of enrollment without upsetting the financial structure of the plan.

Some changes and improvements in Blue Shield benefits for the Kansas City Plan are announced for an effective date of July 1, 1955. There is no rate increase with these changes.

Diagnostic benefits of EKG BMR, and laboratory—formerly available only on hospital stays of more than three days—will now be provided from first day, regardless of length of stay.

Payment for doctors' visits, which were available from first day on hospital stays of more than three days, will now start with the fourth day. They will continue for 70 days, however, just as they previously did, except that the allowances have been increased.

Medical service (doctors' calls) for infants under 90 days of age will now be provided. Formerly only surgical benefits were offered for the newborn. The new medical benefits are allowable in cases in which the infant is admitted as an in-patient after the mother has gone home.

Two new diagnostic benefits are added to the Blue Shield schedule—payments for thoracic aortography and angiocardiography, with anesthesia allowances for each.

Architects' plans for the new Kansas City Blue Cross-Blue Shield Building are almost completed. The new structure, to be located at 37th and Broadway, will be a three-story and basement building adequate to house the Plans' increasing operation. Governing boards expect to save an approximate $10,000 in operating expenses in the next ten years.

Pettis County Pot Pourri

C. Gordon Stauffacher, M.D.

I had just examined a patient who was edematous. After the examination I said:

"Your trouble is an excessive amount of water in your system."

"Must be those ice cubes," muttered the patient.

Definition: Adolescence—the age when a girl's voice changes from no to yes.

I had ordered some B_{12} on a patient at the hospital.

A short time later, the nurse called me and said, "Doctor, we are out of B_{12}. Can I give a double dose of B_6?"

They say life is basically an interaction of enzymes—I wonder if they are womenzymes and menzymes.

I had just handed this patient a prescription:

"Doctor," he said, "What I need is something to stir me up—something to put me in fighting trim. Did you put anything like that in this prescription?"

"No," I answered, "You will find that in your bill."

My six year old just came in and asked me, "Daddo, what did one tonsil say to the other tonsil?"

"I don't know, sugar," I replied, "What did one tonsil say to the other tonsil?"

"Dress up, honey," she replied, "The Doctor is going to take us out."

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Carcinoma of the Breast

A Modified Surgical Procedure

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A review of the literature regarding breast carcinoma was made to evaluate the present results of treatment. A recent review of the surgically treated cases of carcinoma of the breast handled by this clinical group was made in an attempt to evaluate or possibly arrive at some means of improving the method of approach or technic of treatment. We were particularly impressed by the poor results obtained in our own cases and others throughout the country in the group of cases that had axillary metastases at the time of surgery. Our cases are reviewed in table 1.

TABLE 1

SURVIVAL TIME IN 65 CONSECUTIVE CASES (ALL FREE OF DISEASE AT THIS TIME)

	Nodes Negative (33)		*Nodes Positive (28)*	
	Alive	*Dead*	*Alive*	*Dead*
Less than 1 year ..	4	0	3	4
1 year	9	0	4	6
2 years	5	1	2	1
3 years	4	0	2	1
4 years	3	1	2	1
5 years	2	0	1	0
More than 5 years	4	0	1 (8 yrs.)	0
Totals	31	2	15	13
Percentage	94%	4%	54%	46%
	Follow-Up Lost on 1		Follow-Up Lost on 3	

It is not the intent of this paper to bring up the old argument of "simple" versus "radical" mastectomy. To the authors, a "radical" procedure should be done if possible, but it is interesting, perhaps instructive, to correlate the figures obtained by different schools of thought on the matter.

McWhirter has shown the results obtained by simple mastectomy plus a definite directed method of x-ray therapy and his results are impressive, and, rather startling. McWhirter's treatment is based on simple mastectomy plus wide roentgen therapy. His basis is that when the axilla is not involved radical resection is not necessary; whereas, when it is involved, surgery often fails (46 per cent plus are the author's figures).

TABLE 2

TREATED CASES—UNSELECTED (SIMPLE MASTECTOMY PLUS X-RAY)—McWHIRTER

Operable	58%	5 years survival	39%	10 years survival
Advanced	30%	5 years survival	15%	10 years survival
		5 yr. survival—Average	44%	

Wangensteen's comments based on his findings at the time of an extended radical procedure that 60 per cent of cases undergoing radical surgery are already beyond the reach of the usual radical procedure and the figures of Handley which indicate that 34 to 40 per cent of all surgical cases show anterior mediastinal or supraclavicular involvement are certainly significant. Handley's figures are shown in table 3.

TABLE 3

HANDLEY'S FIGURE

Node Involvement		
Total Cases (Handley)	100	
1. Nodes free	33	
2. Axillary nodes only invaded	34	
Supraclavicular also	11	(⅓-Andreassen)
(Wangensteen *en bloc* surgery—60% beyond reach with usual radical procedure)		
3. Internal nodes only invaded	4	
4. Both internal mammary and axillary nodes invaded	29	

An additional corollary between these figures and the general results in cases having axillary metastases can be made from the survival figures as given by Harrington and Haagensen (table 4).

TABLE 4

SURVIVAL FIGURES

Treated Cases (Harrington)	(Haagensen)
Unselected (Radical Surgery)	Selected Series (103)
No axillary nodes involved	No axillary nodes involved
75% lived 5 years	90% lived 5 years
Nodes involved	Nodes involved
35% lived 5 years	41% lived 5 years
5 year average 55%	5 year average 59%

These figures of 55 per cent for the unselected series, or 59 per cent for the selected series, would compare favorably with McWhirter's figures of 58 per cent for "operable" cases, but would be more favorable than McWhirter's general average of 44 per cent as regards the five year follow-up. Thus, it would appear that about an additional 11 to 15 per cent are benefitted by the radical procedure. Undoubtedly we do a number of radical mastectomies that are completely useless in adding to the survival or cure rate when the previously accepted general routine of frozen section of the lesion and immediate radical mastectomy is done. One would not think of doing a radical axillary dissection and leaving one positive node and, yet, we do an analogous procedure when we leave supraclavicular or mediastinal nodes. It would be advantageous to do an anterior mediastinal node biopsy or supraclavicular node biopsy if only for its prognostic value. We feel, however, that if these areas (anterior mediastinal and supraclavicular) are biopsied, one can then go ahead with the radical procedure with a fair amount of assurance when the nodes are negative. In addition, one can, if the nodes are positive, stop with a simple mastectomy in all good conscience and add intensive x-ray therapy directed particularly to the involved mediastinal and supraclavicular areas, or one can go ahead with Wangensteen's extended radical procedure.

In attempting to evolve a plan of treatment, these data have been considered, as have McDonald's suggestion that a triple biopsy of the tumor, anterior mediastinal and supraclavicular nodes be done. In the last year we have been carrying out the following outline of treatment:

OUTLINE OF TREATMENT

I. All patients are set up for radical mastectomy, except
  1. Those with distant metastases.
  2. Those with arm edema (vessel involvement).

II. At Surgery
  1. The lesion is biopsied.
  2. Supraclavicular nodes are biopsied if palpable.
  3. In lesions of the inner quadrants, central lesions or lesions with palpable axillary nodes, the anterior mediastinal nodes are biopsied after freeing the pectoralis muscle anteriorly (1st, 2nd and 3rd interspace progressively).

III. No Radical Procedure is done if
  1. The supraclavicular nodes are positive.
  2. The anterior mediastinal nodes are positive.
    a. In these cases a simple mastectomy followed by roentgen therapy is advisable.
    b. Possible value of radioactive colloidal gold.

IV. A Radical Mastectomy is done when
  1. The supraclavicular and anterior mediastinal nodes are negative.
  2. This is followed by roentgentherapy to the parasternal, supraclavicular, mediastinal and axillary areas if the axillary nodes are found to be positive for carcinoma.

It is particularly important that the x-ray therapy be directed to the supraclavicular and to the parasternal areas in cases with axillary involvement as it has been shown by statistics that 50 to 60 per cent have involvement. We feel that x-ray should also be given to the axillary area and particularly so in those cases in which the lymph nodes or tumor tissue has been cut through, as shown on pathologic study or clinically. In most groups cases with axillary involvement receive x-ray therapy to the axillary area as a standard accepted procedure. In cases in which axillary involvement is present we also carry out this procedure. We feel that the major danger areas are the areas of periphery and we feel that is where the x-ray therapy should also be concentrated.

A simple mastectomy is done if the supraclavicular or anterior mediastinal nodes are positive. This is followed by intensive x-ray therapy to the axilla, parasternal and both supraclavicular areas.

CASE REPORTS

Case 1. Mrs. C. C., aged 43, was seen and examined because of a lump in the right breast which she had noticed for about one week. She stated that she had had some soreness in both breasts at times, but most of the pain and discomfort had been in the left breast, which was the breast that was nursed by her child. However, about a week prior to our first examination she noted a lump in the right breast. There had been no increase in her pain or discomfort. The patient's general health and physical examination was good. Examination of the right breast revealed a lobulated mass in the lower inner quadrant of the breast just adjacent to the nipple. An x-ray of the chest was negative. The remainder of the physical examination, including plevic examination, was negative. She was advised to have the lesion biopsied. She entered the hospital and at biopsy the pathologist reported a carcinoma. The usual radical skin incision was then made and the skin flaps dissected back. There were palpable nodes in the axillary area, but no palpable nodes in the supraclavicular area. The dissection was carried medially and the pectoralis muscle was freed from the sternal attachment in the region of the second rib. The cartilage of the second rib was removed and the internal mammary nodes in the first and second interspace were biopsied. These were reported to be positive for carcinoma. A simple mastectomy was then done and x-ray was started ten days postoperatively. The x-ray therapy was given to the axillary, supraclavicular and anterior mediastinal areas. The patient, although 43 years of age, was having normal menstrual periods and it was felt that x-ray sterilization was advisable and this was done. The patient did satisfactorily postoperatively and has no evidence of recurrence of the present time, although it is felt that her prognosis is poor.

Case 2. Mrs. E. C. Mc., aged 53, was seen for a general physical examination and had no complaints referable to the breast. On examination a small indurated area was felt in the right breast; this was only slightly more indurated than a similar area on the left. The lump was directly beneath the areola adjacent to the nipple on the medial, lower, inner quadrant of the breast. No palpable axillary nodes were felt. No supraclavicular nodes were palpable. In view of the patient's age it was felt advisable to biopsy the area. She was taken to surgery and a biopsy and frozen section revealed schirrous carcinoma. The usual radical type of incision was made and skin flaps dissected from the breast area. On raising the flap and palpating the supraclavicular area, no nodes could be palpated. There were no nodes palpable in the axilla. The second rib cartilage was removed, the internal mammary areas exposed, lymph nodes were removed from the first and second interspace and, on pathologic study, were reported to be negative. A classical radical mastectomy was then carried out, stripping the axillary vein and removing the pectoralis major and minor muscles in the usual type of dissection.

We feel that this patient has an excellent prognosis and, in view of negative nodes in the axillary, supraclavicular and mediastinal areas, no x-ray therapy was given.

Case 3. Mrs. M. S., aged 84, is an elderly woman who was seen in the hospital in surgical consultation with a palpable lesion in the left breast. The lump was moderate size and in the upper, outer quadrant of the breast adherent to the skin, but not to the pectoral structures. The patient's general physical condition was poor, the patient having had uremia recently. She was on digitalis for myocardial heart disease. She was taken to surgery and the classical radical mastectomy incision was made and the skin flaps dissected back. On raising the skin flaps and palpating the axillary and supraclavicular areas, definite hard, axillary lymphadenopathy was palpable and was definitely extending into the supraclavicular area. In view of this definite extension it was not felt advisable or necessary to do an anterior mediastinal biopsy. A simple mastectomy was then carried out, at which time one of the firm axillary nodes was removed and later reported positive. The patient has received deep x-ray therapy to the supraclavicular, mediastinal and axillary areas and the palpable nodes have shrunk down in size and the patient is doing satisfactorily at the present time, although it has been only a short time since operation and it is felt that her prognosis is poor.

Case 4. Mrs. D. M., aged 33, was seen and examined because of a lump in the left breast which she stated had been present for about one year. She stated that about one month prior to being examined she began having some severe pain in the left breast with constant soreness. There was no nipple discharge and there was no definite increase in size of the tumor. The patient had one child. Examination revealed a firm, indurated, tender mass in the left breast measuring about 2½ cm. in diameter in the upper outer quadrant just lateral to the nipple. There was no lymphadenopathy palpable. There was no adherence to the skin or surrounding structures. The patient entered the hospital and at surgery a biopsy of the lesion revealed an intraductal papillary carcinoma of the breast. No axillary nodes were palpable at the time of surgery. A classical radical mastectomy was carried out, removing the pectoral muscles and axillary sheath, lymph nodes and structures. Subsequent pathologic report revealed no metastases to twenty-six out of twenty-six axillary nodes. The patient has done satisfactorily and two years postoperatively is free of further evidence of disease.

In addition to these case reports, we should like to report two cases that were operated on a number of years ago before our present procedure was carried out in which we feel that a radical mastectomy was not indicated and did not, in all likelihood, add any to the ultimate result. At the present time with the procedure we are now carrying out, we do not feel that a radical mastectomy would have been done.

Case 1. Mrs. C. W. F., aged 43, was first seen complaining of a lump and caking of the right breast which had been present for about one month. There had been some slight soreness, but this had not been marked. There was no discharge from the nipple. The breast continued to remain caked and for this reason she came for examination. Examination revealed a large, firm mass beneath the nipple on the right with adherence to the skin and a typical "orange peel" appearance of the skin. Axillary nodes were palpable. The patient was taken to surgery and on biopsy of the lesion the pathologic report was medullary carcinoma. The usual radical skin type of incision was made and, on exposing the axillary area, a large number of lymph nodes were felt having the typical characteristics of metastatic carcinoma. There was no adherence, however, to the vessels of the axilla. We were not carrying out the present procedure at that time, so we went ahead without further biopsy with the classical radical mastectomy in great detail. The patient was given deep x-ray therapy following the procedure. She subsequently developed supraclavicular and localized axillary recurrence which was further treated with x-ray therapy. Following this she developed pulmonary metastases and expired approximately fourteen months following her operation. We do not feel that the radical mastectomy added anything to the duration of life.

Case 2. Mrs. M. B., aged 39, was first seen complaining of a lump in the right breast which had been present for approximately two months. She stated that approximately two years previously she had some serous, bloody discharge from the right nipple, at which time she was seen by a physician but no treatment was given. Two months before she was seen by us she had noticed the lump in the right breast and had had occasional twinges of pain. There had been no further discharge from the nipple and no change in the size of the lump or the breast. Examination revealed the size and configuration of the breast to be essentially normal. There was some retraction of the right nipple with a fissure across the center of the nipple. There was no discharge and none could be expressed. Directly beneath the areola there was a large, firm mass about the size of a small lemon. Directly lateral to this there was another lump about the size of a walnut which appeared to be protruding from the lump beneath the areola. This was hard. The breast was not painful to palpation or pressure. There was also a large, hard lymph node present in the apical region of the axilla. However, this was movable on the underlying structures. There were no supraclavicular nodes palpable to external examination. The patient entered the hospital and at operation a frozen section revealed carcinoma. The usual radical type of skin incision was made and on reflecting the skin flaps and examining the axillary area, numerous hard lymph nodes were palpable. A classical mastectomy was done, as, at that time, we were not carrying out our present procedure. All of the axillary nodes were obviously involved extending up to Halsted's apical node. We now feel that undoubtedly the supraclavicular and internal mammary nodes were also involved, although they were not biopsied. Following operation the patient received deep x-ray therapy and had x-ray sterilization. Two and a half years postoperatively the patient was examined and found to have some tiny, hard lymph nodes palpable in the opposite supraclavicular area. These were biopsied and revealed to be adenocarcinoma similar to that previously removed from the breast. She received further x-ray therapy to the opposite supraclavicular area. Almost exactly four years postoperatively skin metastases developed in the supraclavicular and operated area. She was treated further with x-ray therapy and hormone therapy. She then developed pulmonary metastases and expired four years and eight months postoperatively. In retrospect, it is doubtful that the radical mastectomy added anything to this patient's survival. A simple mastectomy plus extensive deep x-ray therapy, we feel, would probably have carried the patient along as well as the procedure that was done.

COMMENT AND SUMMARY

It is felt that the treatment of carcinoma of the breast has remained fairly stationary for some time in regard to methods of approach and treatment. Our results are fairly good in a group of cases without axillary metastases, but are disappointing in those cases with axillary metastases. Often one does a technically satisfactory procedure, only to have the patient succumb to the disease in a relatively short time. For this reason we have adopted a somewhat different approach which, although not new, is of considerable value prognostically and, perhaps, therapeutically. The further following up of this method of treatment, perhaps by the use of radioactive colloidal gold to be injected into the mediastinal interspace is being considered, and adding high voltage deep x-ray to the peripheral areas in known positive cases may aid in therapy. We have not used Wangensteen's extended radical procedure because of the morbidity involved and particularly because it is technically difficult to do an *en bloc* dissection on these lymphatic structures and feel as such that one has completely surrounded the area of involvement.

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Nutritional Deficiencies

Management in Underprivileged Children

W. E. HENRICKSON, M.D., *Poplar Bluff*

For some years nutritional inadequacy in children has been relatively prevalent in the portion of southeastern Missouri of which Poplar Bluff is the trading center, due to the fact that a considerable segment of the population has an extremely low standard of living. Within recent years an attempt has been made to at least partially solve the problem through the joint efforts of the Poplar Bluff Women's Citizenship Club, the Butler County Health Office and the Poplar Bluff Hospital. As part of a formalized program, parents were encouraged to bring their children to the pediatric clinic of the hospital for examination, treatment and instruction in nutrition. This study reports the results of the examinations and presents a method of management which was found to be effective.

ILLUSTRATIVE CASES

Two case histories illustrative of the 55 children observed over a three month period follow.

Case 1. R. D., a 3 year old Negro female.

Presenting Complaint: Sore throat and leg pains.

Past History: Noncontributory.

Dietary History: The child was placed on an evaporated milk-carbohydrate formula with cod liver oil added. In the third month vegetables were given to supplement the bottle. Meat in small quantities and bread were added to the diet at the age of 6 months.

In spite of the ingestion of small amounts of solid foods, the child continued to derive most of her calories from the formula through the second half of the first year and through the entire second year, never having been weaned from the bottle. Her diet up to the period of admission had, therefore, consisted largely of milk formula or milk, with various high carbohydrate tidbits eaten at irregular intervals during the day. The child had never learned to masticate properly and had never eaten fruits or vegetables. For the two weeks prior to admission she had experienced several nose bleeds. Her knees had become swollen and she had refused to walk.

Physical Findings: Her weight of 25 pounds was below the 3rd Stuart percentile (the 50th percentile is average for healthy children). Her height of 35 inches was between the 3rd and 10th Stuart percentile (the 50th percentile is average for healthy children). The hemoglobin was 68 per cent. The red blood cell count was 3,200,000 per cu. mm. and the white blood cell count was 15,000 per cu. mm. Muscles were small in mass and tone poor. There was impetigo on the scalp. Blepharitis was present. There were numerous small ulcerations in the nose. Dental caries was present and the gums were somewhat reddened, but there was no hemorrhage. Tonsils were enlarged and there was cervical lymphadenopathy. Scorbutic rosary was found on examination. The abdomen was distended. The skin showed numerous impetigo scars and intertrigo was also present. There was pain on movement and tenderness on palpation. The lower ends of the femurs were somewhat swollen.

Diagnosis: Deficiency of ascorbic acid (scurvy), plus a hypoproteinosis and vitamin B complex deficiency was found.

Management: The mother was given detailed instructions concerning the proper diet. The simple basic diet presented in table 1 was the basis for the instructions. Emphasis was placed on ingestion of solid protein foods. It was urged that milk be given only at the end of each meal and that no foods except fruits or vegetables and no liquids except water be permitted between meals. The mother was also instructed in proper diet for other members of the family. Local lesions were treated. Dental care was suggested. Ascorbic acid, 100 mg. daily, and vitamin B complex supplement Mejalin Liquid* 2 tsp. three times a day, along with generous amounts of protein, were prescribed.

Progress: The mother was greatly helped in following instructions by a weekly visit of a Butler County Health Nurse. Dental care was carried out. Pains in the legs disappeared promptly and the child resumed walking. The appetite improved remarkably. Gums were normal after the first month. The hemoglobin increased to 84 per cent during the four month period. At the end of the period the child weighed 31 pounds and was between the 10th and 25th percentile. Her height at the end of the period was 36½ inches, again between the 3rd and 10th percentile.

Case 2. B. W. G., a 5 year old white male.

Presenting Complaint: Underweight.

Past History: Normal.

Dietary History: The child was breast fed until 7 months of age when he was given supplementary food from the table. He was weaned at the age of 12 months. The child was slow to adapt himself to solid foods, preferring high carbohydrate foods washed down with liquids, including milk. At the age of 16 months he had pneumonia. Throughout the preschool period he suffered repeated colds and sore throats and continued to subsist on a high carbohydrate diet, frequently ingested between meals.

The child had always fatigued readily and had always been restless and "nervous." For the preceding month he had suffered from nocturnal enuresis.

Physical Findings: His weight of 36 pounds was between the 10th and 25th percentile. His height of 43½ inches was between the 50th and 75th percentile. The hemoglobin was 72 per cent. Red blood cell count was 3,800,000 per cu. mm. The muscle tone was only fair. Pallor was marked and the muscle mass was about average. The conjunctival vessels of the eyes were injected and the eyes were watery. The child

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* Mejalin Liquid, a palatable solution containing vitamin B complex, liver (fraction no. 1) and iron, was furnished by Mead Johnson & Company, Evansville 21, Indiana through the cooperation of W. D. Snively, Jr., M.D.

TABLE 1

SAMPLE BASIC DIET FOR CHILDREN

Breakfast:

Orange or grapefruit juice
Egg with bacon, ham or lean meat
Cereal
Toast and butter
Milk

Lunch:

Fruit
Meat or meat substitute (cheese, fish)
Bread and butter
Milk

Supper:

Meat, fish, chicken, or cheese
Green and yellow vegetables
Bread and butter
Dessert (fruit or gelatin)
Milk

had slight rhinitis. Dental caries and cervical lymphadenopathy were also found. There were numerous impetigineous lesions over the arms and legs. The legs were slightly bowed.

Diagnosis: Caloric undernutrition, hypoproteinosis and iron deficiency anemia were found.

Treatment: The mother was instructed in a proper diet (see table 1). Mejalin Liquid, 2 tsp. t.i.d., was prescribed. Dental care was recommended The impetigo was treated and the mother was instructed to bring the child back every two weeks. A Butler County Health Nurse was assigned to follow the patient.

Progress: Within a three month period the child's weight increased 4 pounds to place him above the 25th percentile, and his height increased ½ inch to place him just below the 75th percentile. His hemoglobin increased 12 per cent, or to 84 per cent.

At the end of the three month period the child was greatly improved. His attitude and his eating habits, along with his appetite, were also improved. He confined his eating largely to mealtimes.

RESULTS

Results of the study in terms of increases in weight, height and hemoglobin concentration are shown in table 2. The height and weights of the fifty-five children studied for the full three month period were plotted on the Anthropometric Chart of the Children's Medical Center, Boston. I have found these charts to be exceedingly useful in plotting the height and weight changes. These charts employ percentiles based upon repeated measurements of children under comprehensive studies of health and development by Harold C. Stuart, M.D., and associates, Department of Maternal and Child Health, Harvard School of Public Health, Boston, Massachusetts.

"The distribution of the measurements obtained from these children at each age is expressed in percentiles, each percentile giving a value which represents a particular position in the normal range of occurrences. The number of the percentile refers to the position which a measurement of the given value would hold in any typical series of 100 children. Thus, the 10th percentile gives the value of the tenth in any hundred; that is, 9 children of the same sex and age would be expected to be smaller in the measurement under consideration while 90 would be expected to be

TABLE 2

HEIGHT, WEIGHT AND HEMOGLOBIN INCREASE OVER PERIOD OF STUDY (3 MONTHS)

Age in Months	*Sex*	*Number*	*Height Increase*		*Weight Increase*		*Hemoglobin* Increase*
			Inches	*Percentile*	*Pounds*	*Percentile*	
3	M	1	2	No Gain	3¼	No Gain	80-84
4	M	2	2	No Gain	6	50% Gain	76-84
	F	1	4	3% Gain	6½	No Gain	75-84
5	M	4	3	No Gain	5	3½% Gain	77-85
	F	2	1½	No Gain	5½	37½% Gain	73-84
6	M	1	2	3% Gain	4½	7½% Gain	72-84
7	M	1	2	7½% Gain	6	37½% Gain	74-82
	F	1	1½	No Gain	5¼	37½% Gain	78-88
8	F	2	2	No Gain	2¼	7½% Gain	81-87
9	M	1	1¾	No Gain	4½	27½% Gain	68-86
10	M	1	2	15% Gain	4¾	37½% Gain	78-87
	F	1	2¼	No Gain	5	45% Gain	80-84
12	F	2	2	12½% Gain	4½	45% Gain	76-83
13	M	1	1¾	No Gain	4½	37½% Gain	70-82
	F	1	2¾	50% Gain	2½	15½% Gain	75-86
14	M	1	¼	15% Loss	3½	31% Gain	78-88
18	F	1	¾	No Gain	½	20% Gain	68-80
19	M	2	¼	No Gain	3	11% Gain	74-84
20	F	1	¼	3½% Loss	3¼	25% Gain	71-86
21	M	1	2	No Gain	2	No Gain	76-84
22	M	1	0	15% Loss	2½	No Gain	66-80
24	M	1	½	No Gain	3	12½% Gain	74-84
	F	4	¼	No Gain	2	No Gain	73-84
27	M	1	½	3% Loss	1½	7½% Gain	72-82
30	M	2	1	3½% Loss	1¾	No Gain	75-84
36	M	2	¾	7½% Gain	2¼	No Gain	75-82
	F	5	¾	No Gain	2½	7½% Gain	71-83
42	M	1	¼	No Gain	3¼	20% Gain	76-84
45	M	1	¼	No Gain	2¼	No Gain	76-82
48	M	3	0	No Gain	3½	13½% Gain	70-82
	F	1	0	9½% Loss	1¼	No Gain	78-84
60	F	2	1	No Gain	3¼	12% Gain	77-86
72	F	2	0	7½% Gain	1	No Gain	81-86
84	F	1	0	No Gain	2½	No Gain	78-86

* Hemoglobin figured as 15 gm. being 100 per cent.

larger than the figure given. Similarly the 90th percentile would indicate that 89 children might be expected to be smaller than the figure given while 10 would be larger. The 50th percentile represents the median or midposition in the customary range. Here, the 10th and 90th percentiles are represented in heavy lines to show the limits within which most children remain. The lighter lines in the graphs divide the distribution into segments for ready recognition and description of individual differences as well as of the 'regularity' of progress. The 3rd and 97th percentiles represent unusual though not necessarily abnormal findings."

Using this type of chart, an increase in a child's percentile position after a period of time would indicate that he had increased his rate of gain so as to be in a better position in regard to the median. Conversely, when a child receives a lower percentile rating it indicates that he has decreased his rate of gain. The average increase of the height percentiles for the fifty-five children studied was 4 per cent. The average increase in the weight percentiles was 23¾ per cent. These averages are somewhat misleading because in some cases gains were rather great, while in other cases there was actually no gain or even a loss, in respect to the median. The fact that the general average for height and weight were both on the positive side, nevertheless, was encouraging and indicated an appreciable improvement in the nutritional status of the children. The rapid relative weight gain in comparison to height gain would be expected, since weight increases occur more rapidly following institution of a proper diet than do height increases. The height increase was encouraging, however, since in many respects height is a better index of growth than mere weight. The average per cent of hemglobin increase was 10 per cent, again, an excellent gain, since iron was not given in what might be termed therapeutic amounts. This increase in hemoglobin resulted from the provision of generous amounts of protein, as well as from other elements such as iron.

In addition to weight and height increases, there was considerable improvement in the children from the psychologic aspect. Irritability, fretfulness and disobedience all decreased. Appetites improved dramatically, chiefly because the children were permitted to become hungry between meals. Vomiting, a frequent symptom prior to admission to the study, was almost entirely alleviated. Constipation improved and the incidence of infection was greatly decreased. There was also a definite improvement of the tone of the musculature. Also the pallor of the child was relieved in almost all incidences. No important difference in the incidence of dental caries could be seen. If any improvement along these lines were to occur, it would not in all probability become manifest during the brief period of the study.

In addition, there was complete relief of the symptoms and findings as shown in table 3. Table 3 shows the incidence of various physical findings of malnutrition in seventy-six children. At the start of the study seventy-six children were examined and the results were noted. During the period of study some children failed to return at the specified times and places for checkups and treatment. Therefore, at the conclusion of the study it was found that only fifty-five children actually participated in the full three month study. All of the untoward findings in table 3 responded to the program of treatment which included, of course, necessary local treatment, institution of a balanced diet, and the administration of nutritional supplements such as Mejalin Liquid.

TABLE 3
FINDINGS

Finding	*Incidence*
Perleche and cheilosis	27
Abnormal tongue	60
Scarlet stomatitis and glossitis	28
Scaling of the skin	23
Impaired healing	48
Impetigo	34
Increased capillary fragility	65
Injection of conjunctival vessels	19
Marginal blepharitis	10
Rickets	11
Rickets with rosary	5
Scurvy	8
Malnutrition	59
Anorexia	68
Vomiting	16
Dental Caries	52
Bleeding Gums	23
Nervousness	44
Frequent sore throats	26
Frequent colds	51
Pin worms	18
Round worms	8
Hypochromic anemia	75

DISCUSSION

Miranda[1] employed the term "malnutrition" for vitamin and mineral deficiencies, "undernutrition" for deficiencies in caloric intake, and "hypoproteinosis" for deficiencies of protein, a syndrome described in detail by Lynch and Snively.[2] Clearly, when one deficiency is present other deficiencies are frequently found. Such was the case in the majority of the fifty-five children studied.

Deficiency of one nutritional element may lead to a deficiency of another. For example, the occurrence of pellagra was for many years endemic in regions where corn was an important dietary staple. The association of pellagra with a corn diet was believed to be fortuitous until two facts were discovered: (1) the protein of corn (zein) is strikingly deficient in tryptophan, and (2) tryptophan is a precursor of niacin. Thus deficiency of tryptophan led to a decreased synthesis within the body of niacin, and the resultant niacin deficiency was largely responsible for the pellagra which developed.

Similarly, caloric deficiency may lead to a protein deficit even though the intake of protein is fairly adequate, since in caloric deficit protein may be consumed for energy purposes rather than for tissue synthesis. Likewise, inadequacy of protein in the diet may result in a deficiency of calcium, since adequate protein intake is required for the proper utilization of calcium. Microcytic hypochromic anemia, formerly regarded as due chiefly to iron deficiency, may apparently be caused by an inadequate intake of protein in the presence of adequate dietary iron. Lynch[3] has presented the interesting speculation that perhaps rickets is a result not only of vitamin D and calcium deficiency but also of protein deficiency. The frequent reports of rickets in children who are excessive milk drinkers lends credence to this hypothesis.

An interesting mixed deficiency, the exact nature of which is not entirely clear, is that of "kwashiorkor."[4] The history in this condition invariably reveals a low protein intake; there are other findings that indicate that more than a simple protein deficiency is involved.

Waife,[5] in discussing the chronologic development of nutritional deficiency, pointed out the various conditional factors which may cause inadequacy. He stated that the first stage in any deficit is inadequate ingestion; the second, decreased bodily reserves, perhaps detectable biochemically. The third stage is impaired physiologic function, and the fourth, the development of anatomic lesions.

Of first importance in the correction of any nutritional deficiency is the provision of an adequate, well balanced diet containing generous amounts of all the nutritional elements, including protein, fat, carbohydrate, minerals, vitamins and water. The use of palatable nutritional supplements such as Mejalin Liquid plays a helpful role in the management of many deficiencies, particularly when parental cooperation is not all that could be desired. This is usually the case in underprivileged children. Useful in getting across the basic facts on nutrition to parents are the "Ten Commandments of Good Childhood Nutrition," as presented by Snively.[6]

TEN COMMANDMENTS OF GOOD CHILDHOOD NUTRITION

I. Permit no foods between meals, except vegetables and fruits.

II. Permit no liquids between meals except water.

III. Your child may —— may not —— have a small glass of milk at the end of each meal. He should not have milk between meals or at bedtime.*

IV. Fruits may be substituted for vegetables in the diet.

V. Do not expect your child to eat three large meals a day. You should be happy if he manages to eat two good meals a day. Remember that the pre-school child is not growing very rapidly, and needs only a fraction of the food that he did when he was an infant, when his size is taken into consideration.

VI. Sometimes children will take cottage cheese if they are given cottage cheese "country style," whereas they will not take it if it is the large curd type. Some children will take cottage cheese when mixed with pineapple or other fruit when they will not take it otherwise.

VII. Inexpensive cuts of meat are just as valuable as the expensive cuts. For example, hamburger contains good meat protein just as does beefsteak.

VIII. Only on rare occasions should your child be permitted to eat any of the following substances, and then only if he is eating normally: cookies, cake, pies, ice cream, crackerjack, popcorn, nuts, candy, soft drinks.

IX. Make no fuss whatever over your child's eating! If he eats, take it for granted that he should. If he doesn't, do not show your displeasure in any way. When he comes to the table, permit him to make the decision as to whether he wishes to remain at the table and eat or be dismissed from the table. If he shows no inclination to eat, dismiss him from the table and permit no food until the next meal!

X. Remember that eating is a privilege, not a duty, and help your child to remember this. Remember, too, that the child who has never been permitted the privilege of getting hungry enough to enjoy a good meal is underprivileged in every sense of the word!

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* Milk is temporarily omitted if the child has been drinking to the exclusion of other solid protein foods.

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Cancerous and Precancerous Changes of the Skin

Choice of Method of Treatment

THOMAS F. B. DARNELL, M.D., *Columbia*

CANCEROUS, PRECANCEROUS, or suspected precancerous lesions of the skin are treated by a great number of physicians and by physicians in several different fields or specialties. Because of this fact, there is a widespread interest and a widespread discussion as to methods of treatment of these types of skin lesions. In many cases the same satisfactory results can be obtained by any of two or three different methods, depending upon the fact that the physician is proficient in that particular method he is using. There are many cases presented to the individual physician in which one particular method of treatment is indicated or certain methods are contraindicated. Several basic criteria should be kept in mind in making this choice of treatment. These are listed and are best put in question form.

1. Is this method the one most apt to bring about a complete cure?
2. Is it less likely to produce undesirable sequelae?
3. Will it give the best cosmetic result along with a complete cure?
4. Is it the easiest or the most simple to perform and still bring about a cure?
5. Is it the least expensive of the methods that can cure the patient?
6. If it can cure the patient, will this method be the least discomforting?

This paper will deal with the following methods of treatment:

1. Excision by scalpel.
2. Excision by endothermy (electrosurgical excision).
3. Electrodesiccation or coagulation.
4. Cautery (hot iron).
5. X-ray therapy.
6. Radium or radon therapy.
7. Therapy by radio active isotopes or elements.
8. Chemosurgery.
9. Combinations of two or more of these.

In choosing one of these methods of treatment to be used in any particular case one must decide which of these meet the criteria already discussed. Numerous factors play a part in this choice. These factors will be discussed under each method.

I. Excision by Scalpel.—This is the method which is probably the most commonly employed. It is a simple method in most cases but is difficult in many areas such as about the eyes, of the nose, ears, mouth, anus, genitalia, distal portions of fingers. In destroying cancers or precancerous lesions of tight skin over cartilage, other methods are usually preferable to excision by the scalpel. The reason is obvious. The same applies to treatment of cancerous or precancerous lesions of the blephoral margins of the eyelids. Excision by scalpel is an excellent method of treatment in most cases of carcinomata of the lips. Some carcinomata of the lips are treated successfully by other methods such as excision by endothermy or radiotherapy. Skin over the distal portions of the fingers is usually too tight for good approximation after the scalpel. At times excision by scalpel of this and similar areas is indicated even if it is necessary to follow by a graft. Ofttimes small or medium sized lesions of the face can be treated as well by other means than surgical excision and with better cosmetic and clinical results. Ordinarily one can say that excision by scalpel is only contraindicated for cosmetic results or because some other method is more simple. There are exceptions to this. Often, also, surgery is combined with radiotherapy to bring about the best result.

II. Excision by Endothermy.—This method of excision is often overlooked when making a choice of treatment. To one familiar with the method, it is simple, results in less bleeding and thus often brings about a cosmetic result that cannot be duplicated. This is particularly true in excision of moderate sized squamous or basal cell carcinoma of the ear or nose over cartilage. The lesion is excised, edges and base coagulated and left to heal by granulation. It is surprising how small a scar will result if properly done. The same procedure is often applicable to excision of carcinomatous lesions of the fingers, hands and face if the lesions are not too large. This is the method of choice for treatment of carcinomata of the face in people with chronic actinic dermatitis, provided again that the lesions are not too large. Then, excision by scalpel is indicated. Excision of early cancerous or precancerous lesions of the lip, about the eyes and other similar areas are often easily and completely done by this method. It can be used on most parts of the body if the lesions are not too far advanced.

III. Electrodesiccation or Coagulation.—This is often mistaken for or miscalled cautery. It is not a hot iron or needle. Certain machines that produce this type of spark for desiccation can be adjusted to produce a bipolar cutting current as described under the section "Excision by Endothermy."

Along with electrodesiccation or coagulation, one usually uses a curette to debride treated tissue and to further clean out or remove tissue. This type of treatment is particularly useful in treatment of senile keratoses and small carcinomata, particularly the basal cell type. Some larger basal cell carcinomata may occasionally be destroyed by this method but larger squamous cell carcinomata usually are not treated in this manner. This method is particularly useful to treat small lesions about the eyes, on the lips (especially leukoplakia), on the nose, in other inaccessible areas, or in any area where there might be difficulty in excision or possibly undue risk in radiotherapy.

IV. Cautery (by hot iron).—This method is not used as much as it was several years ago. Some men who are quite proficient in the use of the cautery still use it—in place of electrodesiccation or occasionally instead of electrosurgical excision. Many dermatologists still use this method to destroy lesions of superficial epitheliomatosis. The same type lesions usually can be effectively treated by electrodesiccation or coagulation. In either of these methods, curettage is employed as a rule to help remove pathologic treated tissue. Cautery is contraindicated as a rule if the lesions are too large or deep. Cautery is still at times preferable to treatment by radiotherapy or surgery.

V. X-ray Therapy.—Therapy by X-ray for cancerous lesions is particularly useful in those areas that are hard to treat by surgery, scalpel or excision by endothermy. Sometimes a particular carcinoma may be so large that surgery is impractical, or a large lesion may be so situated that surgery is impractical. In addition, one cannot in some cases be sure that he has totally eradicated certain carcinomata, especially by surgery. In some of these cases X-ray therapy serves as an additional measure to help bring about a complete cure of the malignancy. I feel that for cosmetic purposes it is best, if at all possible, to delay the X-ray therapy in such cases until the surgical wound has healed. Many radiologists and dermatologists treat a majority of the carcinomatous lesions they see by X-ray therapy alone. These lesions so treated are usually on the open parts of the face, neck, head and body and not over cartilage. This is a perfectly logical way to treat these if all the criteria mentioned previously are met. I feel that particular care should be taken not to treat by X-ray a carcinoma on a face, forehead or neck in the presence of a chronic actinic dermatitis unless the other methods will not bring about a cure or are impractical. In such a case, the patient already has damages from electromagnetic wave radiations —ultraviolet waves. The area of the skin of these people so treated therefore is prone to react more violently to radiotherapy and is also more prone to result in undesirable sequelae or further chronic actinic dermatitis. Sometimes, of course, it is necessary to treat such skin by X-ray but most times it can be avoided. For the same reason, senile keratoses are best treated by other means such as by electrodesiccation and curettage, rather than by X-ray.

Most physicians who use X-ray in treatment of skin malignancies try not to use X-ray therapy to cancerous or precancerous lesions on the hands or fingers. This avoids the sometimes adverse effects of the X-rays on the small bones and cartilage in those areas. There is much argument, however, as to when one must or must not treat lesions over the cartilage of the nose or ears with X-ray therapy. These areas are hard to treat by scalpel and thus X-ray therapy is considered. There has been much refinement in the last several years in the technic by which these areas are treated by X-ray. As a result there have been fewer cases in which there has been damage of a permanent nature to the underlying cartilages. It is best, I believe, in such cases to use another method of treatment if possible or practicable. The type of carcinoma often plays a part in the decision as to the method of treatment. A squamous cell carcinoma over cartilage acts usually like a basal cell carcinoma. This is provided the carcinoma has not spread beyond the bounds of the cartilage. If the spread is beyond these bounds, the carcinoma acts as other squamous cell carcinomata. Therefore in confined and not too large carcinomata of these areas, excision by endothermy usually brings about a cure and a good cosmetic result when done by one adept in this procedure. Most lesions in these areas will fall in this treatment group. If a carcinoma goes out of bounds and is a basal cell carcinoma, X-ray therapy is usually indicated. If however the carcinoma is a squamous cell carcinoma and it goes out of bounds, X-ray therapy, in my opinion, is not always as efficient as excision by scalpel. There is the risk also of cartilage damage if X-ray therapy is used. Surgery in these cases is evidently difficult and often requires plastic repairs. Sometimes the area to excise is such that surgery is impracticable or sometimes it is uncertain as to whether the whole lesion can be excised. In such a case X-ray therapy may be used instead of or as an adjunct to surgery. Generally X-ray therapy is not used on lesions of the scalp unless cosmetic results are no factor. One must remember, also, when treating a red headed or light skinned patient with X-ray, that the area treated will be more sun sensitive than in the case of a dark skinned person.

X-ray therapy is usually contraindicated in certain types of atypical cancerous or precancerous lesions because of the resistance of these particular types to radiotherapy. Included in these resistant types are: (1) epitheliomata *in situ;* (2) epitheliomata, sclerosing; (3) epitheliomata, erythematoid; (4) epitheliomata, calcifying, and (5) Bowen's disease. Malignant melanomas are not within the province of this paper. It is a well-known fact, however, that they are also resistant to radiotherapy.

X-ray is an excellent method of treatment of carcinomata of the skin, but it must be remembered that it leaves some permanent changes or sequelae in a majority of the cases. Usually these changes are minor but can under certain circumstances be a problem to the patient or physician.

VI. Radium or Radon Therapy.—Much of the indications and contraindications to X-ray therapy apply to radium or radon therapy. Therapy by either of these methods, however, is more specialized or adaptable for use in particular areas or helps one limit the treatment to a confined area.

VII. Radio Active Isotopes or Elements.—This is a relatively new field as far as treatment of carcinomata of the skin is concerned. Because of this fact, treatment has been mostly on an experimental basis. As yet it is not practical to treat large or serious carcinomatous lesions with these radio active substances. Treatment of the lymphoblastomata is another matter and will not be discussed in this paper.

VIII. Chemosurgery.—This term was originated by Dr. F. E. Mohs who developed a method for microscopically controlled removal or excision of cancer. He learned that zinc chloride injected into tissues fixed and killed the tissues but preserved the tissues histologically. Mohs has used this method successfully since 1936 for treatment of cancers of the skin. His cure rate has been excellent and he found this method, in his hands, superior to several other methods.

In this method, the fixed tissue is excised with a scalpel and then examined microscopically to determine if all of the malignant tissue has been removed. Lunsford, Templeton, Allington and Allington in 1953 developed a slight modification of Mohs technic with good results. They now use this method in selected cases and find it has the following advantages: (1) it offers microscopic controls for removal of skin cancers, (2) the cancer is eradicated with a minimum amount of destruction of normal tissue, (3) it is an ambulatory method of treatment and may therefore be an office procedure. It is particularly useful in treatment of certain types of cancers such as cicatrizing types of basal cell cancers and certain cancers found in difficult locations which tend to recur after orthodox treatment. It is useful in the eradication of squamous and mixed cell carcinomata as well as basal cell carcinomata. It should be used only by those familiar with or experienced in the method.

IX. Combinations of Two or More Methods.—This usually is a combination of some type of surgery with radiotherapy of some sort. This method has been discussed to a certain extent already. The same general criteria apply to this as to single methods. Most generally a combination of methods is used if and when one does not feel that a single method will positively bring about a cure. Far advanced carcinomata of the vermilion border of the lips are often treated by some type of excision and then by X-ray or radium therapy. Advanced or penetrating carcinomata in other areas are also treated in like manner. It is quite common to treat areas of metastasis with X-ray after surgery. Further indications for this method will not be discussed in this paper.

The statements made are the opinions of myself and were formulated after practical considerations pertaining to the anatomy, physiology and pathology of the skin. Being a dermatologist and having access to the discussed methods of treatment, I am not partial to any one method because of training in that method. Each physician is more adept or prefers to use one method more than another method as a rule but the ultimate goal is the cure of the patient, and one must therefore be guided completely by this. It is felt then that the criteria mentioned are the yardstick of treatment. Many factors in the treatment of cancerous and precancerous lesions of the skin have not been covered in this paper. It was the purpose of this paper to cover the most fundamental and pertinent factors.

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Case Report

Black Widow Spider Bite

RICHARD R. GRAYSON, M.D., *Perryville*

THE SYNDROME resulting from the bite of the black widow spider is one encountered more frequently in medical textbooks than in actual clinical practice. Inasmuch as few physicians, particularly those living in large urban areas, have had the opportunity to see such cases, I feel that experiences in handling three cases within a two month period of time are worth reporting in detail.

A review of the literature on this subject is not given, for what little is known about this disease is well presented in standard medical texts. The theoretical, biochemical and pathologic aspects of the disease will be left to others, and the description of the condition as it occurred in three people in this rural community will be presented and discussed.

INCIDENCE IN PERRY COUNTY

To my knowledge, there were few cases of black widow spider bite until this year. In 1953, there was one case in the county, which has a population of 15,000. This summer (1954) there have been a total of five cases (two of them treated by other physicians). All six patients survived. Five of the six patients incurred the bite on the genitalia or buttocks while using an outdoor toilet.

REPORT OF CASES

Case 1. A 28 year old construction worker was rushed to the office by his partner from their place of work with the complaint of severe abdominal pain. The patient was barely able to stagger, moaning and groaning and twisting about, into the examination room.

He complained of great pain in his abdomen and back, particularly the latter. He pointed to the upper lumbar area as the site of the pain and seemed unable to tell whether the pain in his back was radiating to the abdomen or vice versa.

With considerable difficulty, he was persuaded to lie on the table and be examined. Even then, he rolled from side to side, uttering many sounds of agony and, at first, insisted that he could not lie still.

With much difficulty, he was examined, nevertheless. The entire abdomen was rigid. There was no question of localized tenderness or rebound tenderness inasmuch as the abdominal wall could not be depressed at any point. Liver dullness on percussion was preserved and the bowel sounds were normal.

The blood pressure was 120/80, the pulse 70, the temperature 98.6 F., and the respiration normal. While the patient was being examined for a possible hernia, he mentioned that he had been bitten on the glans penis "by something" about five hours earlier while sitting in a privy. The glans penis was examined and an area of erythema 3 mm. in diameter was seen. There was no induration, edema or local tenderness.

The patient, upon questioning, then stated that the pain in his back and abdomen began about thirty minutes after the insect bite and had gradually increased in severity until it became intolerable while he was driving his truck four hours later.

It occurred to me that this was probably a black widow spider bite and, as a therapeutic test, I injected 10 cc. of 10 per cent calcium gluconate intravenously. Just as the injection was completed, the patient exclaimed that the pain was gone. He smiled happily, arose immediately and stated he wished to go home.

He was persuaded to enter the hospital, however, where he was given Demerol and oral calcium gluconate when the pain recurred. Within forty-eight hours he was symptom free.

It was noted that even though the pain immediately subsided after the calcium, the rigidity of the abdominal muscles was undiminished until many hours later.

Case 2. A 7 year old boy was brought to the hospital emergency room at 4:00 a.m. with the complaint of abdominal pain radiating to his legs.

The boy, who was already stoic at the age of 7, said only that his "stomach hurt" and did not complain any more. He was not in any great distress and allowed himself to be examined without objection.

His temperature, pulse, breath sounds, respirations and heart rate were normal. The abdomen was rigid and could not be depressed. The bowel sounds were normal, liver dullness preserved and there were no other findings.

The parents were told that the boy had apparently been bitten by a spider, but no history of a spider bite could be elicited at this time.

The boy had awakened from sleep at 1:00 a.m. because of severe abdominal pain which gradually became worse. There was no vomiting. By the time he reached the hospital, however, the symptoms were already subsiding. It was not until the next day that the patient remembered that he had been bitten on the right buttock by "something" about one or two hours before the pain began. He had been sitting on an outdoor toilet at the time. Examination failed to reveal the site of the bite.

Treatment consisted only of oral calcium gluconate. Within 24 hours the patient was asymptomatic.

Case 3. At 4:00 a.m. one morning an excited mother telephoned from her farm home twenty miles away to say that her 17 year old daughter was having pain in her neck which spread down her back into her legs. The mother was persuaded to bring the girl to the hospital where, one hour later, she was examined.

The girl was writhing about on the examining table

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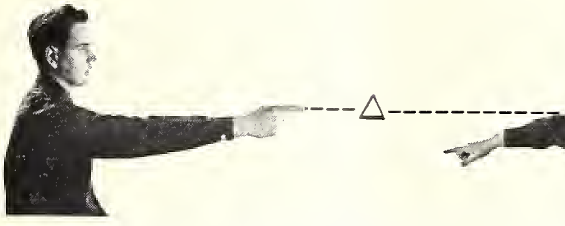

1. Bárány Pointing Test. *The patient points at a stationary object, first with his eyes open and then closed. A constant error in pointing (past pointing) with his eyes closed in the presence of vertigo indicates peripheral labyrinthine disease or an intracranial lesion.*

2. The Caloric (Bárány) Test. *The patient sits with his eyes fixed on a stationary object and the external ear canal is irrigated with hot (110 to 120 F.) or cold (68 F.) water. If the vestibular nerve or labyrinth is destroyed, nystagmus is not produced on testing the diseased side.*

3. The Rotation (swivel chair) Test. *The patient sits in a swivel chair with his eyes closed and his head on a level plane. The chair is turned through ten complete revolutions in twenty seconds. Stimulation of a normal labyrinth will cause nystagmus, past pointing of the arms and subjective vertigo.*

Notes on the Diagnosis and Management of "Dizziness"

I. Vertigo

The term "dizziness" (vertigo) should be restricted to the sensation of whirling or a sense of motion.[1] This sensation is usually of organic origin and is the tangible symptom of a specific pathology.

Moderate vertigo, with a sense of motion and a whirling sensation, may be produced by infection, trauma or allergy of the external or middle ear. Examination of the ear will usually disclose the abnormality.

Severe vertigo, which will not permit the patient to stand and causes nausea and vomiting, indicates an irritation or destruction of the labyrinth. The specific condition may be labyrinthine hydrops, an acute toxic infection, hemorrhage or venospasm of the labyrinth or a fracture of the labyrinth. Multiple sclerosis and pathology of the brain stem should be considered also.

It is important to learn if the patient's sensation is continuous or paroxysmal.[2] Paroxysmal vertigo suggests specific conditions: Ménière's syndrome, cardiac disease and epilepsy. Continuous vertigo without a pattern may be due to severe anemia, posterior fossa tumor or eye muscle imbalance.

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SEARLE

and was crying out frequently, loudly exclaiming that the pain in her back and legs was too great to tolerate. She also said she could "hardly breathe."

The patient had been awakened by a sharp stinging sensation on the right side of her neck at 2:30 a.m. She thought it was a wasp sting. She arose and massaged the area with liniment. Within thirty minutes, however, the pain had spread down the neck and had become more severe. The pain then spread down the right arm, down the back and over the right side of the chest. It then progressed over the left side of the chest, over the abdomen and down the back to the thighs.

Examination showed a 17 year old girl writhing about. The pulse was 85, the respirations 28 and the temperature 99 F. The breath sounds were clear but somewhat shortened in duration. The abdominal and back muscles were rigid.

It was evident that the patient was suffering from the effects of a black widow spider bite and she was thereupon given 10 cc. of 10 per cent calcium gluconate intravenously. The pain in the muscles immediately disappeared, but the rigidity and dyspnea remained.

She was treated with oxygen, Demerol and oral calcium gluconate. Vomiting was intractable for the first twenty-four hours and intravenous fluids were required. She was well enough to leave the hospital in four days.

Further information from the father indicated than an old porch had been torn down the day before the patient was bitten and that it had rained that night, apparently driving spiders into the girl's bedroom which adjoined. The father the next day killed three spiders which filled the description of the black widow; i.e., about one inch spread with red hour-glass figures on the under-surface of the thorax.

COMMENT

The symptomatology of these cases indicates that the discomfort suffered by patients with black widow spider bites is largely due to generalized muscle rigidity and pain. The dyspnea that occurred in the third case was secondary to intercostal muscle rigidity and although no cyanosis or tachycardia was present, dyspnea, relieved by oxygen, was definitely present.

A point to remember is that in none of these patients was the history of spider bite available at the time when the patient needed treatment the most. In the first case, the history of an insect bite was a casual one; in the next, the history was obtained only after persistant questioning, and then it was after the patient was well. In the third case, the history of a bite was available from the beginning, but the type of insect was not known.

In other words, in most cases, apparently, the diagnosis of black widow spider bite will have to be made on clinical grounds and the physician will have to be thoroughly aware of the disease in order to make the diagnosis.

Once a patient has been seen with this disease, it is not difficult to make the diagnosis again because the clinical picture is fairly uniform. The patient appears to be in agony, unless, as in case two, the climax has passed, and the abdomen is in a state of boardlike rigidity.

The differential diagnosis of black widow spider bite is usually simple. A ruptured peptic ulcer is the principle disease to differentiate. The presence of normal bowel sounds, the presence of normal liver dullness on percussion, and the history serve to differentiate the two conditions.

The best test for black widow spider bite apparently is the intravenous injection of calcium gluconate. In no other disease, perhaps, is such instantaneous relief granted from such agonizing misery as here. One could almost say that this test is specific for this disease.

The treatment, at the time these patients were seen, was purely symptomatic. Intravenous calcium gluconate was given for immediate relief. Oxygen was given for dyspnea. Intravenous fluids were given because of persistant vomiting in one case; the vomiting may well have been due to the Demerol instead of the spider bite, however. Opiates are given for pain as it recurs. Oral calcium gluconate was given in these cases on empirical grounds, there being no mention of this therapy in the literature on the subject. One can only say that there seemed to be some benefit; it would seem logical to utilize this form of calcium also, inasmuch as intravenous calcium works so well.

Therapy which has become available since these patients were treated includes an antivenom produced in a horse serum which has recently been placed on the market. I have had no experience with this preparation, but it would be a welcome adjunct to the therapy of these cases. Antivenom should be good prophylaxis for a known spider bite if given during the first few hours. Black widow spider antivenom could be used routinely for spider bites, even though the type of spider is unknown, just as tetanus antitoxin is used for certain types of injuries.

SUMMARY

Three cases of black widow spider bite are described in detail.

The discomfort following such a bite is largely due to generalized muscle rigidity and pain.

The diagnosis must usually be made on clinical grounds rather than by history.

The clinical picture is fairly uniform and is characterized best by the intense abdominal rigidity and abdominal and back pain.

The differential diagnosis involves, primarily, a perforated peptic ulcer.

A good therapeutic test for black widow spider bite is intravenous calcium gluconate.

The treatment includes parenteral and oral calcium, opiates, fluids, oxygen and antivenom. This is believed to be the first reported use of oral calcium.

Special Article

The Challenge of Preventive Medicine

W. PALMER DEARING, M.D., *Washington, D.C.*

It is a great privilege to have a place on the centennial program of the Clay County Medical Society. Our country is still youthful enough so that the passing of 100 years in the life of an organization becomes an event of real significance. In your case, it is also one of pride—pride in years of service, of achievement, of leadership in our professional field. I would like to join with your colleagues and friends—and with the people of Clay County—in paying tribute to your past and in wishing you well for the future.

I particularly welcome the opportunity to talk with a group of fellow physicians, especially with an organized society. Progress in public health, my own specialty in medicine, depends today more than ever on the practicing physician.

The reasons for this are not hard to find. The leading causes of death and disability are the so-called chronic and degenerative diseases, mental disorders and congenital defects, and accidental injuries. These are today's major health problems in the United States, both for the practicing physician and the public health officer alike.

Unlike the acute communicable diseases, however, these problems do not lend themselves to ready-made solutions—solutions which are themselves the fruits of earlier victories of science and medicine. For many of the acute diseases, as you know, we can apply preventive measures such as treatment of the environment or large-scale prophylaxis for healthy people. At the present stage of medical development, we have no comparable technics for the chronic disorders. There are few simple, relatively inexpensive tests that will detect the early signs of the major chronic diseases with available specificity and accuracy. Moreover, even if the physician does have elaborate diagnostic aids available and even if he does detect and diagnose latent or early disease, the existing therapeutic measures for treating these diseases and controlling their sequellae are by no means as effective as he would like them to be.

Coupled with the inadequacy of our preventive and therapeutic armamentarium we have the fact that the

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Delivered at the 100th Anniversary Conference of the Clay County Medical Society, Excelsior Springs, November 4, 1954.
Deputy Surgeon General, Public Health Service, U. S. Department of Health, Education, and Welfare.

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number of persons who are likely to have chronic or degenerative disorders of a serious nature is increasing year by year. Our population is growing, and it is aging. The average length of life in the United States has increased twenty-one years since 1900. The older age groups, among whom the chronic diseases have long been the major health problems, now constitute nearly 10 per cent of the total population—and their numbers increase yearly.

The chronic and congenital disorders are also on the rise in the younger age groups. Children today live through early infancy and childhood with diseases and impairment which they could not have survived even fifteen or twenty years ago. Physicians today are faced with larger numbers of young people suffering from congenital heart disease, from neurological conditions and the like.

Other factors are affecting our health resources. Among the most important is our contemporary environment—a complex and interwoven combination of social, physical and psychological elements. Today's environment is a possible source of ill health as well as of good health. The increasing use of chemicals—in industry, in food production and in the home—is a pervasive factor in human health. We have hardly begun to understand our new chemicals or to discover their effects on human beings. Yet none of us can escape their influence. The twentieth century problem of atmospheric pollution, for example, is no longer confined to big cities or large industrial centers, but is a potential threat to health in semi-rural and even some rural communities. In recent months, we have seen an upsurge of interest in this problem; in some cities "smog" has become practically the number one municipal concern.

There are other health problems of similar significance—water pollution, housing, mental and emotional disorders, the burden of viral diseases and many others. Suffice it to say that they are knotty, often obscure, and perplexing to the world of science. What we will consider here is their impact on and their challenge to preventive medicine.

I do not have to remind this audience that preventive medicine is an integral part of medical care. It is part of your everyday practice of medicine, along with diagnosis, treatment and rehabilitation or aftercare. Your patients are as entitled to your best knowledge of preventive medicine as they are to your therapeutic skill.

Undoubtedly, the great physicians have always appreciated the role of preventive medicine and have recognized that the practice of medicine calls for a complete understanding of the patient as a member of a family, a group and a community. They have always weighed social, environmental, cultural and economic factors in their treatment regimes. In fact, the very prototype of the "family doctor" is the man who is sharpened by training and endowed by experience with a closeness to the patient—his needs, desires, fears and aspirations.

By tradition as well as by definition, preventive medicine is the responsibility of the family health advisor, the general physician, who guides the entire family in all matters pertaining to individual health protection and promotion.

Yet the concept of preventive medicine, as we think of it today, is of relatively recent origin. We now talk about the relationship between preventive medicine and clinical medicine, not because prevention does not pervade all of medicine, but because it is useful to identify preventive medicine as a specific field. In this era of specialization and fragmentation, we all need to be reminded to focus on the patient as a whole human being. This applies equally to the surgeon and the ophthalmologist, the radiologist and even the pathologist as well as to the general practitioner and the public health physician.

Public health itself can be termed an applied specialty in this field. In effect, it is the organized application of preventive medicine, usually undertaken by the community as a whole in response to community needs and problems.

Even if we consider preventive medicine a specialty, however, we know that is not the exclusive province of the public health physician. For preventive medicine is a concept as well as a discipline. And the concept should be embodied in all medical practice, the responsibility of everyone who deals with the patient.

The practicing physician, for example, must use such preventive technics as are known in combatting the health problems of a population where the proportion of older people is on the increase.

He must use all available resources in a community in order to achieve early case-finding—to get patients in his office at a stage of disease when treatment can be most efficacious. Such case-finding, plus prompt diagnosis and follow-up treatment, and adequate rehabilitation services, all contribute to prevention insofar as they forestall continuing disability and premature death.

Within the century of your Society's life tremendous changes have taken place, changes that have revolutionized medicine and the world in which it is practiced. And although the advances include a host of brilliant achievements in medical and surgical technics, there are large blank areas in our knowledge and application of preventive measures.

Let us recall briefly some of the changes in family and community life in the United States. In place of the large stable family in a small, self-contained community, where social relationships are well established and all age groups have a place, we find smaller family groups that move frequently from place to place and maintain few continuing contacts with their neighbors and relatives. Earlier reliance on family and relatives in time of illness or economic distress is being replaced by dependence on the community and its resources.

Concurrently, methods of production have vastly improved, making possible higher standards of living. Education at all levels has become more widely available. Regional differences and barriers are diminishing under the impact of rapid communications. The interdependence of the individual and the community is manifested in the growth of community hospitals, public health departments, social welfare agencies, and systems of social insurance, which have developed to meet newly identified needs.

The changes in American life have been accompanied by parallel changes in medical practice. Forty years ago, the family practitioner had intimate personal knowledge of his patients and their families. Today, however, he is yielding ground to relatively impersonal hospital practice by specialists, each often concerned with but a fraction of the total problem confronting the patient. At the same time both increased scientific knowledge and increased public understanding of health requirements have broadened the demands upon the medical profession.

Today's physician therefore must be equipped to deal with the effects of the total environment on health, the social environment as well as the physical. He must be prepared to plan the total health care of the patient, preventive as well as therapeutic. Exclusive attention to a restricted range of biological phenomena can no longer be considered good medical practice, if it ever was.

Accurate diagnosis and prescription of remedies and treatment regimes by themselves may be of little avail in preventing illness or its recurrence. Let us take a child with recurring bouts of rheumatic fever and a damaged heart. Before that biological-medical problem is solved, the physician has to deal with an interlocking series of problems, involving many aspects of family and community life. What kind of home does the child come from? Does he have to sleep in the same bed with other children? Are there other illnesses in the family? What is the school doing about his education? Is the physician not only using prophylactic penicillin to prevent recurrences following infections, but has he alerted the child's dentist to the need for such measures after an extraction?

This example illustrates a cardinal point in preventive medicine today—the use of therapy in prevention as well as cure. Many of the new antibiotics not only shorten morbidity and reduce complications but also abort many incipient cases of disease. Certainly all of us need to be alert to the possibilities and potentialities of antibiotic therapy in preventive medicine.

We also need to be aware of two other basic aspects of preventive medicine today: the diversity of needs and the diversity of resources. Today's physician must have knowledge of all the specialized medical and related services in the community working for preventive medicine. If his patients are to be returned to useful activity, if further complications are to be averted, he must establish working relationships among a variety of specialized personnel and facilities.

In addition to his concern with individual patients and their families, the physician should also be prepared to assume leadership in the community's attack upon health problems through the organization and operation of community health services.

We all know that the practicing physician gets in touch with the health department and with other community health resources when help is needed to meet an immediate need. But how much of this contact is casual and haphazard—and how much is the result of advance planning and consultation? Certainly the kind of teamwork necessary to meet the challenge of preventive medicine today calls for active liaison and open communication between the medical profession and the community's organized health services.

In the past, this partnership between federal, state and local health agencies, on the one hand, and national, state and local medical societies, on the other, has contributed greatly to our success in the war against communicable diseases. The Public Health Service, for example, has conducted research and has, in collaboration with state and local agencies, demonstrated new and effective methods against the acute infections and against tuberculosis and veneral disease.

State and local health departments have, in turn, maintained health statistics, applied environmental controls, conducted case-finding programs, and made available a wide variety of aids and services to practicing physicians. These have included laboratory services in the diagnosis of communicable diseases, distribution of prophylactic agents, public health nursing and follow-up, and health education of the public.

As a result of these efforts, people who were unaware of their illness and who would not otherwise be reached, have been brought under treatment by the private physician. This process of finding, diagnosing and treating disease in its incipient stages has benefited the patient, the physician and the community.

The private physicians, as individuals, have collaborated by reporting cases of communicable disease and by prompt and efficient management of their cases, including the reporting of contacts. Medical societies have maintained committees on public health and preventive medicine and on many specialized problems which concern the health agencies.

The record of accomplishment against the communicable diseases speaks well for this system and for the spirit of cooperation on which it is based. This same spirit will enable us to make the partnership between medicine and public health equally effective against chronic diseases and other current health problems.

Earlier I presented a fairly bleak picture of the inadequacy of our weapons against chronic illness and long-term disability. While acknowledging these gaps, we must also recognize that the present decade is witnessing the introduction of a variety of preventive, diagnostic and therapeutic measures which are prolonging life and preventing or even reversing serious impairment. One of the goals of federal, state and local health agencies, in fact, is to find and perfect the technics, that will give both the general practitioner and the health officer more effective tools for dealing with the problems of chronic and degenerative disorders, and little understood infectious diseases.

There are promising leads on the research and development fronts. For example, the possibilities of improved diagnostic aids and chemotherapy for some types of cancer are great. Through examination of vaginal cells by the Papanicolaou method any qualified pathologist can detect cancer of the uterine cervix in a latent period which lasts from three to four years. Treatment of such carcinoma *in situ* is practically 100 per cent successful in preventing invasive cervical cancer. The major health problem here is fast becoming one of education and motivation, namely, to get women who have no symptoms in for examination, and to educate the general physician to have the examination made as a routine.

Chemical approaches to cancer diagnosis and therapy also are distinct possibilities. Undeniable evidence of their clinical usefulness, especially as an adjunct to radiation and surgery, is growing. Experience with patients continues to yield new proof that several of the chemical agents now available, while not curative, add months of comfort and productivity to the lives of both children and adults. For example, the use of the folic acid antagonists in the treatment of acute leukemia has given us one of the most dramatic gains in cancer chemotherapy. Hormonal therapy is being

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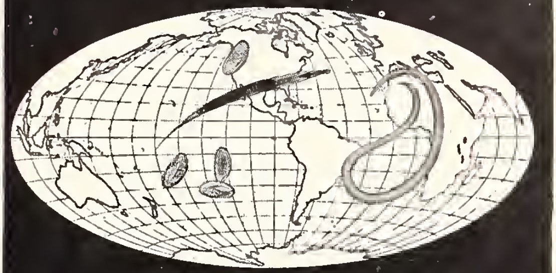

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more widely used in the treatment of cancer of the breast, and the prostate.

Certain diseases of the heart and circulatory system are also yielding to new and improved drug therapy. Today an amazing array of drugs of varying types and degrees of potency are available to the physician in combatting hypertension. These range from the still useful phenobarbital to the widely publicized rauwolfia and the most powerful chemical thus far developed to lower blood pressures—pentapyrrolidinium. While none is the nonhazardous, completely "ideal" drug which science is seeking, each represents a forward step toward the practical control of high blood pressure. Some workers in the field predict that if the present rate of research progress continues, such a drug will be found within the next five to ten years.

Significant advances are being made in the control of diabetes. The Public Health Service is, for example, encouraging the widespread application as a public health procedure of a simple blood sugar test for discovering unknown diabetic persons and bringing them under treatment. We are also undertaking a study of the effect of pregnancy on the prediabetic and mildly diabetic mother and her child, with the hope that control of blood sugar level during pregnancy may protect not only the mother but her unborn child against the development of diabetes.

We appear to be on the road to a major advance against epilepsy, a disease that for centuries has baffled medicine and caused untold human suffering. In recent months, a team of biochemical and clinical research scientists at our National Institutes of Health has demonstrated that some cases of epilepsy are associated with deficiency of glutamic acid in brain tissue and that this can probably be remedied. They have found that at least one chemical agent—glutamine—is effective in passing blood-brain barrier in order to correct the glutamic acid deficiency found in epileptic brain tissue. Although this work is still in the experimental stage, we have evidence that epileptic seizures can be greatly reduced, and in some instances eliminated, by the administration of the drug.

These are but a few examples of recent research findings that point to the possibilities of preventive medicine and public health in the future. The question is: are we, private physicians and public health physicians, ready to put these advances to work? Are we ready for the widespread and intensive applications of new preventive medical technics? Let me illustrate some of the complexities by referring to another outstanding piece of contemporary medical research in poliomyelitis.

You all know, of course, about the poliomyelitis vaccine trials held this spring and summer under the sponsorship of the National Foundation for Infantile Paralysis. About 1,800,000 children in forty-four states participated in one of the biggest medical experiments of all time. Results of these field trials are not expected to be available until next spring, but the hopes of the investigators—and of millions of parents throughout the country—are high. We in the Public Health Service are participating in this study through the follow-up of reported cases and through assisting in the various epidemiological and clinical phases. Twenty-three epidemic intelligence officers from our Communicable Disease Center in Atlanta have been detailed to this activity.

Even if this particular vaccine should not live up to its promise in the laboratory, we are undoubtedly on the threshold of a real preventive for paralytic poliomyelitis. Once the preventive is tested and proved, the challenge to the medical and public health professions will emerge. Such factors as method of administration, duration of immunity, possibility of infection or side effects, physical and emotional hazards, must be weighed by the investigator, the physician and the public health administrator. Sound health education of the public must accompany any large scale immunization program. Community resources will have to be effectively mobilized. Members of all the health professions will have contributions to make.

Here indeed will be an opportunity for the health professions to work together for the control of a crippling and killing disease. Here indeed is the necessity for joint leadership in preventive medicine clearly indicated.

Fortunately, the physicians of Clay County have valuable allies in their mission of preserving and promoting health. Within the last two years, I understand, the people of Clay County have supported and organized a county health department. Certainly, they have shown an awareness of need and a public-minded determination to meet their health problems. Close collaboration between the oldest and the youngest of Clay County's health promotion organizations—the medical society and the health department—is the surest guarantee of continued progress.

The 100th anniversary of the Clay County Medical Society comes at a time of great progress and even more exciting promise in the field of health and preventive medical science. I am certain that during its next 100 years, your Society will contribute substantially to the fulfillment of that promise.

BOOK REVIEW

PATHOLOGY, Edited by W. A. D. Anderson, M.A., M.D., F.A.C.P., Professor of Pathology and Chairman of the Department of Pathology, University of Miami School of Medicine; Director of the Pathology Laboratories, Jackson Memorial Hospital, Miami, Florida. With 1241 Illustrations and 10 Color Plates. Second Edition. C. V. Mosby Company, St. Louis. 1953. Price $16.00.

The first edition of this book appeared in 1948, five years ago. The second edition has been partly revised and partly rewritten. It represents the work of thirty-three authors who are all authorities in the fields that they have covered. The editor has covered the field on endocrinology. The new edition has many of the old illustrations replaced by new ones. The vast field of pathology has been well covered and the text is more of a reference book than a textbook for medical students. Parts of the book have been written in fine print for which the reviewer can see no reason except making the book less in bulk. Special attention has been given to the description of the anatomic pathology as correlated to clinical medicine. The discussion of recurrent inflammation using the appendix as an example in the third chapter is open to considerable question. The discussion of follicular cysts and corpus luteum cysts in the thirty-ninth chapter fails to draw a distinction between the physiologic cysts of the ovary and pathologic cysts derived from the graafin follicle and the corpus luteum. Discussion of the appendicitis in chapter twenty-six leaves much to be desired. The book is of value to all physicians as well as pathologists. This book is a fundamental publication and every laboratory and department of pathology should have ready access to it.

F. J. C. and D. B. F.

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Bumbalo, T. S., Gustina, F. J., and Oleksiak, R. E.: J. Pediat. 44:386, 1954.

White, R. H. R., and Standen, O. D.: Brit. M. J. 2:755, 1953.

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Brown, H. W.: J. Pediat. 45:419, 1954.

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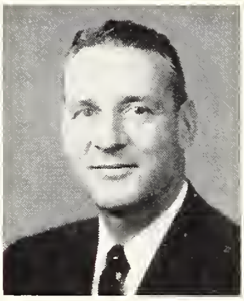
President's Page

Senate Bill 226

The proposed legislation to create a joint licensing board is dead in the Senate Committee on Public Health and Welfare.

The Council of the Association recognized this as a fact and so reported to the House of Delegates at the meeting in Kansas City. The report of the Council recommended that the study begun two years ago be continued and that all possibilities be explored in order that an acceptable solution to the basic problem of multi-licensing boards in health care may be found. The House of Delegates agreed unanimously to this recommendation.



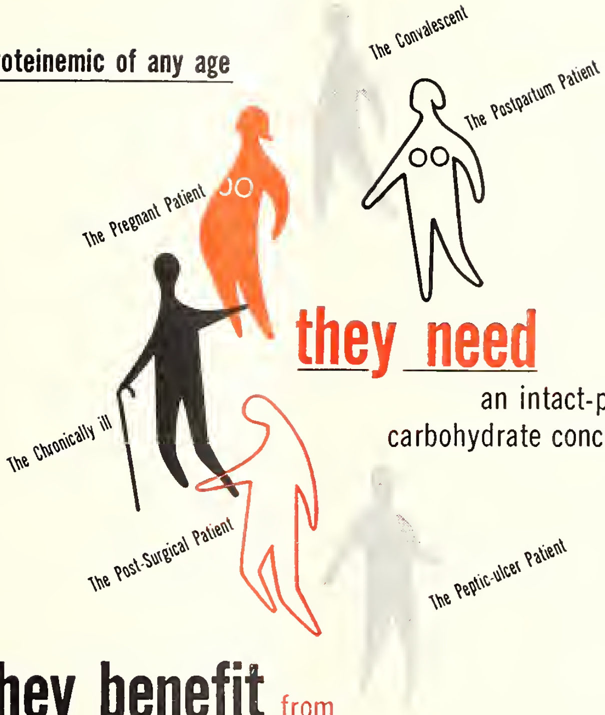
Officers and Councilors will do everything in their power to develop a plan for future legislation which will accomplish the objectives we all seek.

Members are urged to send any suggestions they may have to the executive office. You may be sure that all suggestions will be studied with care.

Our retiring President, Dr. H. E. Petersen, in his address to the House of Delegates, stressed the point that we have lost a battle but we have not lost a war. He stated "The proposal defined and acquiesced in by the intelligence of the medical profession had very little support from doctor's emotion and enthusiasm. We lost a battle because we did not have the will to win it. We lost because, in some degree, there were members of what should have been a united army who defected from the cause."

It is my hope as your President that we will close ranks, put our shoulders to the wheel and win.

The hypoproteinemic of any age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EDITORIALS

Carl F. Vohs, M.D., Elected President-Elect

Carl F. Vohs, M.D., St. Louis, was elected President-Elect of the Association by the House of Delegates of the 97th Annual Session, and Victor B. Buhler, M.D., Kansas City, was installed as President.

Other officers elected included Joseph C. Peden, M.D., St. Louis, and F. L. Feierabend, M.D., Kansas City, delegates to the American Medical Association; L. P. Forgrave, M.D., St. Joseph, Byron M. Stuart, M.D., Boonville, and D. I. L. Seabaugh, M.D., Jackson, Vice Presidents; Jerome I. Simon, M.D., St. Louis, Treasurer. E. Royse Bohrer, M.D., Jefferson City, was reelected Secretary, and W. S. Sewell, M.D., Springfield, was reelected Chairman of the Council. Joseph C. Creech, M.D., Troy, was elected Councilor from the Fourth Councilor District.

Fifty year pins were presented at the annual banquet to Drs. Gustav A. Lau, St. Joseph; Edward Crites, Sedgewickville; D. I. L. Seabaugh, Jackson; Frederick C. Lamar, Hermon S. Major, M.D., and Elmer L. Parker, M.D., Kansas City; Freeman L. Finley, Overland; Edward E. Robinson, Adrian: Charles L. Klenk, St. Louis, and Charles P. Lewellen, Louisiana. Those not present at the banquet and to whom pins were sent are Drs. William H. Minton, St. Joseph; Robert I. Davis, Birch Tree; Robert F. Williams, Springfield; Frank D. Dickson and Don Carlos Guffey, Kansas City; William P. Birney, Hannibal; George M. Park, Eureka; Ernest Spitzer, University City; Jerome E. Cook, Charles F. Henke, Virgil Loeb, Roy E. Mason and Sherwood Moore, St. Louis; L. E. Rolens, Granby.

Bills in the 68th General Assembly

The 68th General Assembly, the second five month session of the Missouri Legislature, has had about as many bills introduced as the former unlimited sessions, and many affecting the medical profession.

Senate Bill 60, introduced by a special Senate committee on mental health composed of Senators A. M. Spradling, Jr., Cape Girardeau, chairman; John W. Noble, Kennett; Hartwell G. Crain, St. Louis County, and Robert Linneman, St. Charles, has passed the Senate and is now under consideration by the House committee on governmental reorganization.

The bill provides for a commission of five persons, three of whom shall be physicians skilled in the treatment of nervous and mental diseases, to be appointed by the Governor. The commission shall appoint a director for the Division of Mental Diseases for the State of Missouri. The commission shall have general supervision over the director in all phases of operations of the state mental hospitals dealing with medical care. Many persons interested in mental health have recommended that the director of the Division of Mental Diseases should be a physician, preferably a psychiatrist. However, salary limitations and other considerations have not made this possible in the past. It is hoped that Senate Bill 60 may lead to improved administration of the Division through the medium of the commission.

House Bill 462 provides that the Governor shall appoint the director of the Department of Public Health and Welfare who, in turn, shall appoint the heads of the three divisions, public health, mental diseases and welfare. At present all of these persons are appointed by the Governor.

This bill conflicts with Senate Bill 60 relative to the commission on mental diseases. Past experience indicates that there is need for a change in the administration of the Division of Mental Diseases and that House Bill 462 will not accomplish that purpose. Therefore, members are urged to contact legislators urging support of Senate Bill 60 and urging defeat of House Bill 462.

House Bill 457 creates a division of registration in the Department of Commerce consisting of all examining and licensing boards, including the State Board of Medical Examiners. It provides that the director of the Department of Commerce shall be the secretary of each of the examining boards or may designate such person. He shall be responsible for employing all personnel and shall have the *full* and *sole power* to make inspections and to see that the statutes are enforced. No examining board may elect its own secretary nor employ any person without the consent of the director. When a vacancy first occurs on any of the boards after passage of the act, the Governor shall appoint a layman thereto, who has never practiced the profession involved.

Obviously, if House Bill 457 becomes law, the power of the State Board of Medical Examiners is seriously weakened. The board would be unable to take action against any person violating the law in any way without the permission of the lay director. No continuity in the employment of personnel would be possible because all personnel would be employed through the politically appointed director. Persons who have no knowledge of or interest in the problems of medicine or medical education would be permitted to pass upon purely professional problems. Physicians are strongly urged to notify members of the legislature of their opposition to H. B. 457.

House Bill 562 also deals with the State Board of Medical Examiners and creates a special appeals board, appointed by the Governor, composed of the presiding judge of the Supreme Court and two other members, one of whom shall be a member of the same profession as the person filing the appeal. Any person claiming to have a right to be licensed to practice a profession who is denied the right to take an examination or who, after examination is denied such a license, may appeal within twenty days after he receives notice thereof and the appeals board described shall then consider the appeal.

The regular licensing board shall then be bound by the decision of the special appeals board. All expenses connected with the appeal shall be paid for by the regular examining board.

Another section of the act provides that members of the examining board may be guilty of a misdemeanor and may be liable for damages.

If House Bill 562 is seriously considered by the legislature, it is extremely doubtful that members of the medical profession would care to serve on the State Board of Medical Examiners.

A Second Century Convocation

A significant event has occurred in Missouri—Washington University's Second Century Convocation. The scope and effect of that celebration extends far beyond the boundaries of the state, but the rewards of influence will fall largely within that region. Missourians can take pride in the dignity of the proceedings. The array of distinguished speakers gave proof to the value and importance of education, and to the contribution Washington University has made regionally and to the nation. If it were possible to extract one single essence as representative of the demonstrations that have passed, it would be the importance of the liberal arts in bringing understanding of things as they are. The development of technical as well as social sciences depends upon that knowledge. Only by such broad comprehension can we adjust living among ourselves as well as with others. It is with that aim that the University has reviewed its past, and it is with dedication toward that goal that the University enters its Second Century Development Program. Washington University has taken its place with the really great universities in striving for the Blessings of Liberty.

During the Convocation the University conferred honorary degrees upon certain distinguished educators and citizens of the nation. Among those who received that honor is the Reverent Paul C. Reinert, S. J., President, St. Louis University. Citations were presented a number of alumni for outstanding achievements and services. Three former presidents of the St. Louis Medical Society are included. Citations were given Colonel Lee D. Cady, M. C., Dr. Frederick E. Woodruff, and posthumously to Dr. Robert E. Schlueter. Other physicians among the citees are Dr. James Barrett Brown, Dr. Warren H. Cole, Dr. Glover H. Copher, Dr. Sherwood Moore, Dr. Alton Ochsner, and Dr. Arthur W. Proetz.

The doctors of Missouri represent a segment of population with the greatest investment in education. To them in particular should come realization of the issues at hand. They can be of tremendous assistance in bringing to others the same understanding. In that relation mention should be made of two points in the Development Program.

Nourishment of the liberal arts depends upon a library. Only through that channel can the past speak to the present, and the present speak to the future. There is at hand the possibility for accumulating and preserving documents that may prove of inestimable value. The procurement of adequate library facilities will give life to the liberal arts, and thus advance technical knowledge with benefit for medicine in the future.

Of more immediate concern to medical education is a dormitory for students in that school.

(Continued on page 386)

Medical Journalism for Medics

Do you remember the professor, when you were in medical school, who was "hot" in his particular field and yet his lectures were dull and uninteresting? In contrast, you may also remember the professor whose knowledge and experience in his subject were limited but whose gift of delivery made him somehow seem capable of teaching you more than he himself knew. Then again you probably well remember the professor after your own heart, the man who knew his stuff and knew how to put it out. You could probably recall by name the few who rated this distinction.

As it was then with professors so it is today with medical journalists. The three types are synonymous; the writer who knows his subject but cannot find words to express himself; the writer who has little to say but who says it well, and the writer who possesses the facts and the word power to make his article interesting and instructive.

Good medical journalism requires a sound knowledge of medicine plus journalistic ability.

(Continued on page 386)

Missouri Medical Meetings

Missouri State Medical Association, St. Louis, April 8-11, 1956.
St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.
Barton-Dade County Medical Society—third Wednesday of each month.
Benton County Medical Society—meets only on call.
Boone County Medical Society—first Tuesday of each month.
Buchanan County Medical Society—first Wednesday of each month.
Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.
Callaway County Medical Society—third Thursday of each month.
Cape Girardeau County Medical Society—first Monday of each month.
Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.
Clay County Medical Society—last Tuesday of each month.
Clinton County Medical Society—meets only on call.
Cole County Medical Society—first Monday of each month.
Cooper County Medical Society—first Monday after the 15th of each month.
Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.
Dunklin County Medical Society—first Tuesday of each month.
Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.
Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.
Greene County Medical Society—fourth Friday of each month.
Henry County Medical Society—meets only on call.
Holt County Medical Society—meets only on call.
Howard County Medical Society—meets only on call.
Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.
Jasper County Medical Society—second Tuesday of each month, September through May.
Jefferson County Medical Society—meets only on call.
Johnson County Medical Society—meets only on call.
Laclede County Medical Society—second Monday of each month at 6:00 p.m., at the Louise Wallace Hospital, Lebanon.
Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.
Lewis-Clark-Scotland County Medical Society—meets only on call.
Lincoln-St. Charles County Medical Society—third Thursday of each month.
Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p.m.
Miller County Medical Society—meets only on call.
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.
Moniteau County Medical Society—second Thursday of each month.
Newton County Medical Society—meets only on call.
Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.
North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.
Pemiscot County Medical Society—third Thursday of each month.
Perry County Medical Society—second Thursday of each month.
Pettis County Medical Society—third Monday each month September through May.
Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.
Pike County Medical Society—third Tuesday of each month.
Platte County Medical Society—meets only on call.
St. Louis County Medical Society—second and fourth Wednesday of each month.
St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.
Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.
South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.
Vernon-Cedar County Medical Society—meets only on call.
Webster County Medical Society—meets only on call.
West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

Another successful venture into the realm of Health Education Forums for public consumption has just been completed in St. Louis.

The St. Louis Medical Society, in conjunction with the *Globe-Democrat*, presented a series of four Medical and Health Forums in March and April. Panels of St. Louis physicians answered questions which were submitted in advance by the public through question blanks, published daily in the *Globe-Democrat*.

The forums were held on successive Sunday afternoons, beginning March 13, in the Missouri Theatre with free admission to all. Forum topics were: "Mental Health and Psychiatric Problems," Rheumatic Fever," "Weight Reduction" and "Cancer Cures and Quacks." Justin L. Faherty, assistant to the publisher of the *Globe-Democrat*, served as panel moderator for each forum.

Approximate attendance at the forums ran 1,500, 1,200, 1,000 and 1,000.

In November 1950, St. Louis Medical Society first began holding monthly health forums at the Society auditorium to which the public was invited. The record of attendances at the forums, prior to the series just completed, left much to be desired. The recent forums offer concrete proof of the value of cooperative joint sponsorship between a medical society and an interested newspaper in a successful, purposeful health education endeavor.

In announcing the forum series, *Globe-Democrat* publisher, E. Lansing Ray, said, "The *Globe-Democrat* is always happy to participate in public service events with such far-reaching possibilities as these medical and health forums. Certainly one of the most discussed subjects of our times is health. We feel these forums, with some of St. Louis' most distinguished medical men answering questions, submitted by the public, will provide valuable knowledge and guidance for the people of our community."

Incidentally, have you ever been on television? Take it from me, you may develop an unpalpable mass of uneasiness facing that camera. As a "kick-off" signal for the health forum series, "Medical Problems of Rural Areas" was the panel topic of discussion on "Operations Progress," presented by KWK-TV and KWK, March 6, from 12:00 noon to 12:30 p.m. Participants on this TV panel were: Dr. James Trolinger, Jackson; Dr. Roscoe L. Pullen, Columbia, dean of the

(Continued on page 388)

Members in the News

Among guest speakers at a postgraduate course on "The Pathology of Crime" held at the University of Kansas Medical Center on March 7 and 8, was **Angelo Lapi**, M.D., Kansas City.

Walter J. Burdette, M.D., now professor of surgery at Louisiana State University, has been appointed professor of surgery and chairman of the department of surgery of the School of Medicine, University of Missouri. The appointment is effective July 1, 1955.

One of the new directors of the Council of Social Agencies of Kansas City is **Hugh L. Dwyer**, M.D., Kansas City.

One of the grantees of the John and Mary R. Markle Foundation in 1955 is **Harvey R. Butcher, Jr.**, M.D., who is instructor of surgery at Washington University School of Medicine.

National Hospital Week has been designated May 8 to 14. The 1955 theme is "Your Hospital—A Tradition of Service."

New officers of the medical staff of St. Luke's Hospital, Kansas City, are **Maxwell G. Berry**, M.D., president; **Richard H. Kiene**, M.D., president-elect; **Ernest L. Glasscock**, M.D., vice president, and **John H. Gaskins**, M.D., secretary-treasurer.

The Red Cross Blood Program was discussed by **Stanley S. Peterson**, M.D., Springfield, before the medical staff of the Phelps County Memorial Hospital on February 22.

"Arteriosclerosis" was the subject presented by **Kenneth C. Price**, M.D., St. Louis at the Pettis County Medical Forum in Sedalia on February 15.

"Heart Disease" was discussed by **Roscoe L. Pullen**, M.D., Columbia, at a lecture sponsored by the Jackson County Health Forum and the Kansas City Heart Association on February 16.

President Eisenhower has nominated Major General Silas B. Hays, Army Medical Corps, as The Surgeon General of the Army, effective June 1.

The first in a series of annual "Albert Kuntz" lectureships and awards, honoring Dr. Albert Kuntz, M.D., professor of anatomy and director of the department of St. Louis University School of Medicine, was presented on March 23 by James C. White, M.D., Boston. His subject was "The Role of the Autonomic Nervous System in Chronic Persistent Pain."

The Missouri State Medical Secretaries and Assistants Society is holding their fifth anniversary meet-

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ing at the Muehlebach Hotel, Kansas City, April 30 and May 1.

The associateship of **John D. Mott**, M.D., has been announced by **E. H. Trowbridge, Jr.**, M.D., Kansas City.

The Council of Social Agencies of Burlington, Iowa, had as speaker at their March meeting **R. E. Bruner**, M.D., Kansas City.

"Medical Aspects of Eye Safety" was presented by **Will R. Eubank**, M.D., Kansas City, before a meeting of the Central States Safety Congress in Kansas City on April 1.

At a meeting in Liberty on March 1, sponsored by the northwest division of the Missouri Association for Social Welfare and the Clay County Mental Health Association, **John J. O'Hearne**, M.D., Kansas City, was speaker.

At a recent meeting of the American Laryngological Association in Hollywood Beach, Florida, **Bernard J. McMahon**, M.D., St. Louis, was elected president. This is the oldest nose and throat society in the world, having been founded in New York in 1879.

"Medical Progress" was the topic presented by Thomas H. Alphin, M.D., Columbia, at the Pettis County Forum in Sedalia on March 15.

At a meeting at the First English Lutheran Church, St. Joseph, on March 15, **E. F. Butler**, M.D., told of his experiences as an army doctor in Korea and Japan.

At a meeting of the Missouri Society of Anesthesiologists on March 13, **Charles H. White**, M.D., Kansas City, was elected president-elect. **Seymour Brown**, M.D., St. Louis, was installed as president. **Edward O. Kraft**, M.D., Brentwood, was elected vice president, and **Russell D. Shelden**, M.D., Kansas City, secretary-treasurer.

Chairman of the April Cancer Crusade in Bates County will be **C. W. Luter**, M.D., Butler.

Speaking before an all day meeting of representatives of American Cancer Society chapters in six northeast counties held at Kirksville in February, **G. R. Hudson**, M.D., Kirksville, had "How Your Family Doctor Can Help You in the Control of Cancer" as his topic.

Colored slides taken on a recent trip to the Holy Land were shown by **Esther B. Winkelman**, M.D., Kansas City, at the Raytown Christian Church on March 10.

Speaking at a public meeting of the Greater Kansas City Foundation for Exceptional Children, **C. G. Leitch**, M.D., Kansas City, discussed proposed legislation dealing with the care of mentally deficient children.

At a medical program presented each year by the Marshall Monday Club, the speaker was **Fred H. Lundgren, Jr.**, M.D., Kansas City.

At the ninth annual Rocky Mountain Cancer Conference in Denver on July 13 and 14, **Wendell G. Scott**, M.D., St. Louis, will be one of the guest speakers.

The Missouri Society for Neurology and Psychiatry, at a semi-annual meeting in Kansas City recently, elected **E. H. Trowbridge, Jr.**, M.D., as president.

Because of failing health, **A. P. Erich Schulz**, M.D., St. Charles, has resigned as physician-in-charge of the Emmaus Home in St. Charles.

As a surprise on his 80th birthday, **H. E. Gerwig**, M.D., Downing, found many friends awaiting him on his return from church on March 13. His birthday had been on March 10 but the celebration was delayed the few days. The *Memphis Democrat* of March 17 carried a nice article about Dr. Gerwig.

The Central High School P. T. A. of Hannibal heard **D. B. Landau**, M.D., Hannibal, discuss "Child Health Developments in Missouri" at a meeting on March 15.

A dinner was held on March 16 in honor of **W. E. Baggerly**, M.D., Montrose, on his 73rd birthday.

An international symposium on cardiovascular surgery in Detroit on March 18 was attended by **Hugh E. Stephenson**, M.D., Columbia.

The Medical Record Librarians of Kansas City were addressed by **Hector Benoit**, M.D., Kansas City, at their March meeting on "Anatomy and Surgery of the Heart."

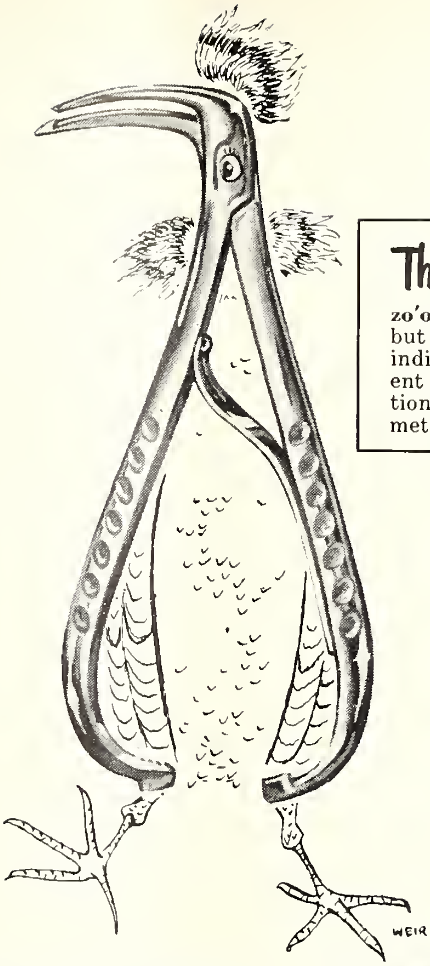
How to feed and manage children with diabetes was discussed at a public meeting in Kansas City on March 1 by **Robert L. Jackson**, M.D., Columbia.

Commentator on a play presented by the American Association of University Women of Kansas City on February 28 was **Sylvia Allen**, M.D., Kansas City.

The Seventh District of Missouri State Association of Licensed Practical Nurses was addressed at a February meeting by **Patricia F. Lanier**, M.D., Fulton.

After two years in military service, **Jack M. Davis**, M.D., has resumed his practice in Raytown.

An electric cardiac defibrillator developed by **Hugh**



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zo'oid *(zō'oid)*, *n.* An entity which resembles but is not wholly the same as a separate individual animal; a more or less independent animal produced by fission, proliferation, or the like, and not by direct sexual methods.

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ST. LOUIS

E. Stephenson, M.D., Columbia, has been given to the University of Missouri by an instrument company.

Headquarters of the St. Louis Blue Shield Plan were moved recently to remodeled quarters in the St. Louis Medical Society Building, 3839 Lindell Blvd.

The Missouri State Board of Medical Examiners will give an examination at St. Louis University on June 1 and 2, and at Washington University on June 6 and 7. Reciprocity applications will be considered on June 5. All applications are to be filed in the office of the executive secretary at least two weeks before their consideration.

The alumni of St. Louis City Hospital will hold a dinner meeting on June 1 at the Chase Hotel, St. Louis, at 6:30 p.m.

Newly elected officers of the St. Louis Urological Society are **Justin Cordonnier**, M.D., president; **Louis Berard**, M.D., president-elect, and **John Mackey, Jr.**, M.D., secretary-treasurer.

A panel discussion on "Heart Disease in Industry" at the Rockhurst College Institute of Social Order, Kansas City, on February 24, was moderated by **F. L. Feierabend**, M.D., Kansas City.

The Prairie Village Sertoma Club was addressed on March 24 on "Common Misapprehensions in Heart Disease" by **John Cashman**, M.D., Kansas City.

"Gallbladder Disease" was discussed by **Claude J. Hunt**, M.D., Kansas City, at a meeting of the Florida State Medical Society at St. Petersburg on April 5. Dr. Hunt spoke on "Surgery of the Thyroid" at an Iowa-Nebraska Medical Assembly at Council Bluffs, Iowa, on March 24.

NEW MEMBERS

Abele, William A., M.D., Boonville
Bates, George C., M.D., North Kansas City
Blount, Henry C., Jr., M.D., St. Louis
Bryan, William H., Jr., M.D., Kansas City
Cooper, Leo F., M.D., Kansas City
Darrow, Robert S., M.D., Kansas City
Edwards, Jefferson R., Jr., M.D., St. Louis
Elser, Otto H., M.D., Independence
Finkle, Robert H., M.D., Kansas City
Garfinkel, Bernard T., M.D., St. Louis
Hata, Daikichi, M.D., Boonville
Izmirlian, Grant, M.D., St. Louis
Kratz, Paul E., M.D., Cape Girardeau
Ladd, Charles B., M.D., St. Louis
Lieb, Francis X., M.D., St. Louis
Makous, Norman, M.D., Kansas City
Rodes, Ned D., M.D., Mexico
Shade, Virgil E., M.D., St. Louis
Sherry, Sol, M.D., St. Louis
Williams, Starks J., M.D., Kansas City

DEATHS

Tyzzer, Robert N., M.D., La Jolla, California, a graduate of Barnes Medical College, 1912; honor member of the St. Louis Medical Society; aged 67; died January 20.

Armstrong, J. H., M.D., Kirkwood, a graduate of Beaumont Hospital Medical College, 1900; honor member of the St. Louis County Medical Society; aged 80; died January 22.

Bierman, Max John, M.D., St. Louis, a graduate of Washington University School of Medicine, 1923; member of the St. Louis Medical Society; aged 57; died February 21.

Rothman, Paul M., M.D., St. Louis, a graduate of Washington University School of Medicine, 1902; honor member of the St. Louis Medical Society; aged 92; died March 1.

Creane, John C., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1915; member of the St. Louis Medical Society; aged 68; died March 5.

Striegel, Bernard F., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1918; member of the St. Louis Medical Society; aged 70; died March 17.

Bauman, Charles M., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1911; member of the St. Louis Medical Society; aged 68; died March 28.

Barnard, Charles A., M.D., Portage des Sioux, a graduate of Homeopathic Medical College of Missouri, 1905; honor member of the Lincoln-St. Charles County Medical Society; aged 73; died April 1.

DR. SCHLUETER LIBRARY GIVEN ST. LOUIS UNIVERSITY

The private library of the late Robert Schlueter, M.D., a member of the faculty of the St. Louis University School of Medicine for more than thirty years, has been donated to the University by his widow, it was announced March 25 by the Rev. Joseph P. Donnelly, S.J., director of University Libraries.

The collection contains important first editions of Dr. William Beaumont's "Experiments and Observation on Gastric Juices," notable in the investigation of the chemistry of the intestines and stomach. Another interesting part of the collection are the Greek and Latin dictionaries with corrections made by Dr. Schlueter.

During his teaching career, Dr. Schlueter took great interest in medical libraries, and often worked with library officials in evaluating rare medical literature for the University. He was a recognized authority in the field of medical history. The collection also reveals that he was a linguist, historian, a person of fine literary tastes, and a well-travelled man.

Dr. Schlueter was president of the St. Louis Medical Society in 1911, president of the Missouri State Medical Association in 1918, and president of the St. Louis Surgical Society in 1941. The same year he received an award of merit for medical achievement from the St. Louis Medical Society.

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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Grand River Medical Society

The Grand River Medical Society met March 10 at the Strand Hotel, Chillicothe. There were twenty-eight members, eighteen Auxiliary members, four pharmaceutical representatives and other guests and visitors. Over fifty enjoyed the fine dinner.

After dinner, the Auxiliary and their guests retired to their meeting room, where they were addressed by Dr. **W. Wilse Robinson, Jr.**, Kansas City, who spoke on "Mental Health."

The scientific program was presented by Dr. **James R. McVay, Jr.**, Kansas City, who discussed "Hits and Misses in the Management of Gallbladder Disease." This was an interesting paper followed by discussion and questions.

The president appointed the following board of censors: Dr. **John N. Martin**, 3 years; Dr. **M. Gearhart**, 2 years; Dr. **Roy R. Haley**, 1 year.

The Society stood with bowed heads in memory and respect to Dr. C. P. Pickett, Princeton, who died recently.

Minutes of the last meeting were read and approved.

There being no further business, the meeting was adjourned.

E. A. Duffy, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

W. F. FRANCKA, HANNIBAL, COUNCILOR

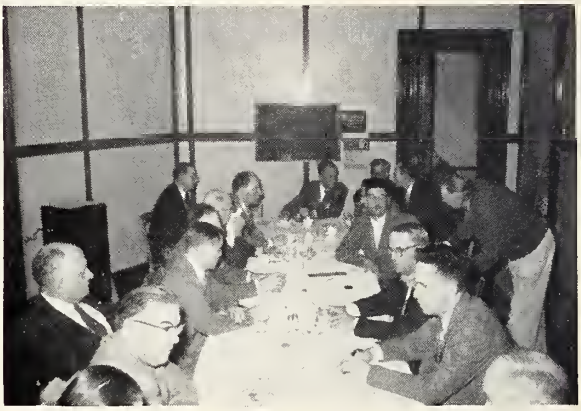
Chariton-Macon-Monroe-Randolph County Medical Society

Dr. **H. E. Petersen**, St. Joseph, immediate past president of the Missouri State Medical Association, was the speaker at the meeting of the Chariton-Macon-Monroe-Randolph County Medical Society at Moberly on Thursday night, March 10.

Dr. Petersen addressed the meeting.

Before the regular meeting, those in attendance inspected the new office of Dr. **C. C. Cohrs** of Moberly.

Following dinner at the Woodland Hospital, members and guests heard an interesting and informative discussion on "Child Growth and Development" by Dr. Petersen. A number of questions were considered following his formal talk. By request, Dr. Petersen also discussed the status of the Single Licensure Bill, pending in the Missouri senate.



The group pauses between dinner and talk.

The audience was attentive.

There were twenty-seven in attendance.

W. D. Chute, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

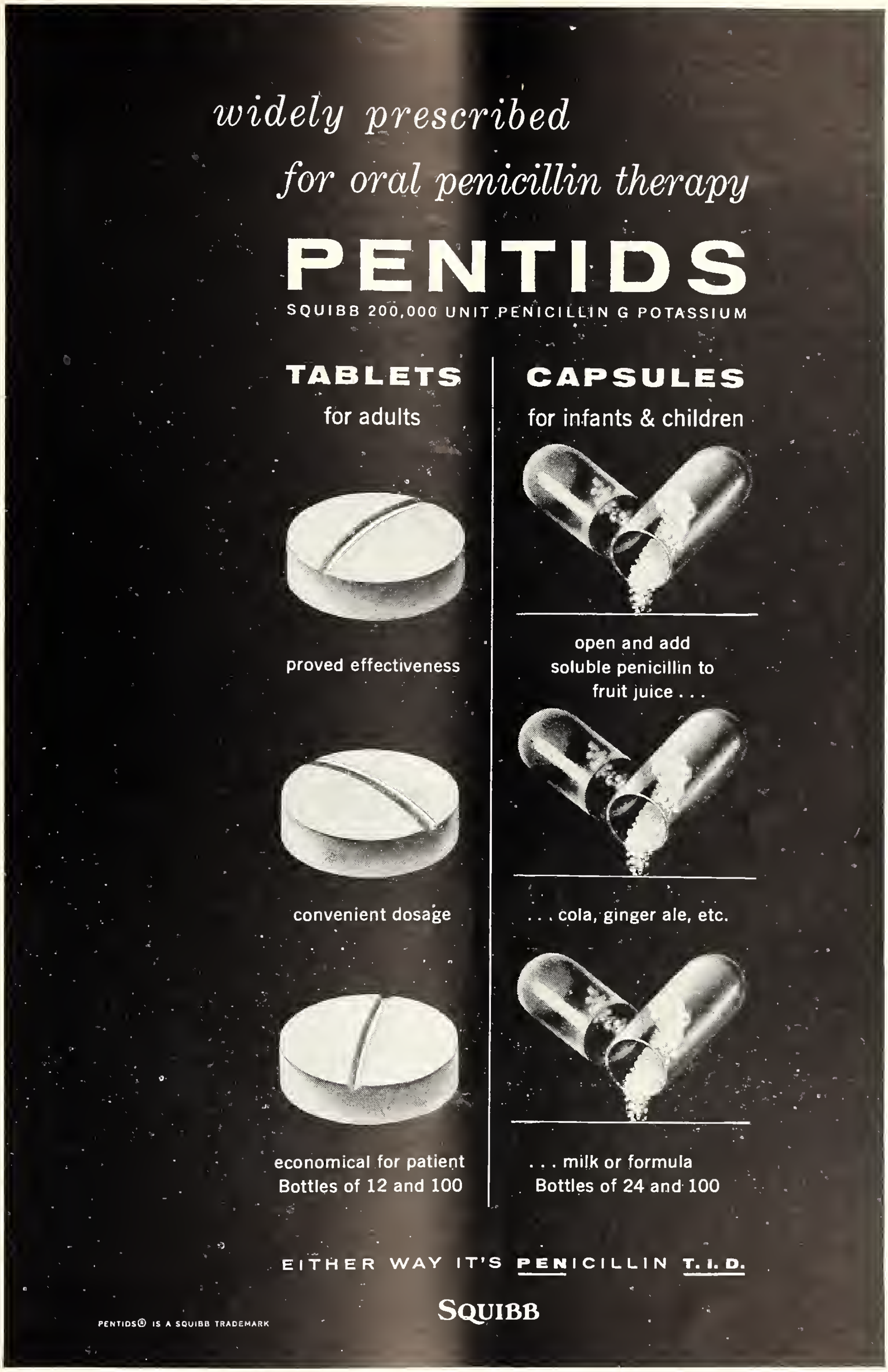
J. LOREN WASHBURN, VERSAILLES, COUNCILOR

Audrain County Medical Society

The Audrain County Medical Society held its regular monthly meeting on March 21 in the cafeteria of the Audrain County Hospital at 8:45 p.m.—inclement weather notwithstanding.

Dr. **William Jolly**, vice president, introduced the speaker of the evening, **James F. Dowd**, M.D., Department of Surgery, St. Louis University Medical School, who discussed, along with lantern slides, "Everyday Problems Involving Plastic Surgery."

The Polio Vaccination Program was brought up by the county chairman, Dr. **Thomas L. Dwyer**, who was appointed by Dr. **James R. Amos**, State Health Department. Dr. Dwyer asked for help from the doctors present who agreed to help out.



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The following doctors were present: **Ernest S. Gantt**, M.D., **William H. Jolly**, M.D., **Harold D. Lankford**, M.D., **Ned Dewitt Rodes**, M.D., **David Rouse**, M.D., **G. P. Kallenbach**, M.D., **Thomas L. Dwyer**, M.D., **J. Frank Jolley**, M.D., Mexico, and Mr. James Moss, Hospital Administrator.

As there was no further business, the meeting adjourned at 10:00 p.m.

Thomas L. Dwyer, M.D., *Secretary*

Postgraduate Course at Missouri University

Sixty-three people, including medical students and physicians, braved inclement weather to attend the final winter postgraduate session at the University of Missouri, under the sponsorship of the Missouri Academy of General Practice and the Medical School of the University.

Sixty-three attended the meeting.

Hugh Stephenson, Jr., M.D., Assistant Professor of Surgery at the University, discussed "When Is Surgery Indicated for Therapy of Gastric and Duodenal Ulcer?"

The Medical School, Departments of Medicine and Pathology, presented a C. P. C.—the abstract of the case being circularized well in advance of the meeting. Dr. **Wm. A. Sodeman**, Professor of Medicine and Dr. **Joseph Flynn**, Professor of Pathology, handled the C. P. C. presentation.

The session closed the series of postgraduate sessions.

A similar series of postgraduate meetings at the University is contemplated for the fall and winter of 1955-1956.

J. L. Washburn, M.D., *Councilor*

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

West Central Missouri Medical Society

Members of the West Central Missouri Medical Society and the Woman's Auxiliary met for dinner at Jack and Emma's Cafe in Harrisonville, Thursday night, March 10.

The program for the evening included: **Robert W. Forsythe**, M.D., Kansas City, who discussed "The Emergency Management of Head Injuries," and **Carroll P. Hungate**, M.D., Kansas City, who discussed "What's the Score on Civil Defense?"

A. L. Hansen, M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

WALTER S. SEWELL, SPRINGFIELD, COUNCILOR

Jasper County Medical Society

Some eighty physicians from Arkansas, Kansas, Missouri and Oklahoma attended a meeting of the Jasper County Medical Society at the Twin Hills Country Club, Joplin, on March 8.

The evening festivities began with a refreshing social hour. An excellent dinner was served, which set the stage for the scientific program.

The speaker for the evening was Dr. **Robert W. Bartlett**, St. Louis, who spoke on "The Diagnosis and Management of Gastro-Intestinal Tract Bleeding." The entire program was both good and lively.

Katharine Kiehl, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

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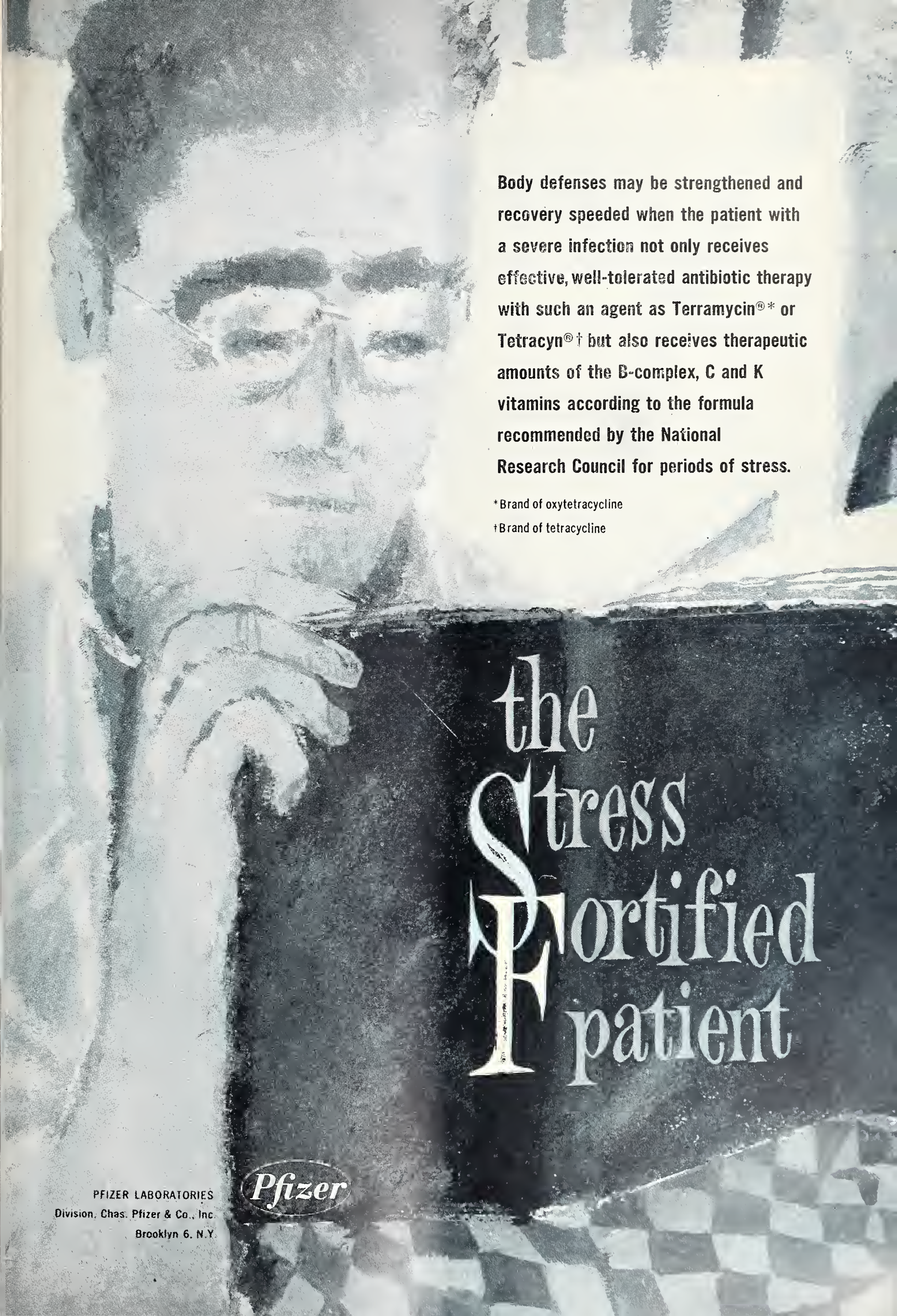
Cape Girardeau County Medical Society

On Monday night, March 7, the Annual Zimmerman Lecture Program of the Cape Girardeau County Medical Society was held at the "Purple Crackle" in East Cape Girardeau, Illinois.

Don C. Weir, M.D., St. Louis, Department of Radiology, St. Louis University Medical School, presented

Four radiologists pose for picture.



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Speakers' table.

Discussion was informal as well as formal.

the lecture. He spoke on "Common Pitfalls in Diagnostic Radiology." This talk was given in a most interesting and practical manner.

The evening festivities began with a social hour followed by a fine steak dinner and then the program. Forty-five members and guests attended.

It was a real pleasure to have Dr. **C. A. W. Zimmerman**, in whose honor these lectures are given, present and looking hale and hearty.

L. R. SEABAUGH, M.D., *Secretary*

News From the Medical Schools

WASHINGTON UNIVERSITY

Dr. Harvey R. Butcher, Jr., instructor in surgery, has been awarded a $30,000 five-year scholarship by the John and Mary R. Markle Foundation to continue his research on the physiology of the urether and the lymphatics of the extremities of man in health and disease, the Foundation announced recently (March 14, 1955). His grant, payable in five $6,000 installments for the period 1955-60, is one of 22 awarded to faculty members of medical schools in the United States and Canada. The scholarship awarded Dr. Butcher is the fourth received by staff members of Washington University School of Medicine through the Grants for Scholars in Medical Science program of the Markle Foundation, a program begun in 1948. Others are Dr. Robert B. King, assistant professor of neurosurgery; and Dr. Jack L. Strominger, assistant professor of pharmacology. Dr. C. Barber Mueller, assistant professor of surgery and assistant dean, recently completed a five-year scholarship.

Grants totaling $149,320 have been awarded by the U. S. Public Health Service, Department of Health, Education and Welfare, Bethesda, Md., to support research at Washington University School of Medicine, Dean Carl V. Moore announced recently. Those receiving grants include: Dr. George A. Ulett, associate professor of psychiatry, and Dr. Eli Robins, assistant professor of psychiatry, $35,000; Dr. George Saslow, professor of psychiatry and of psychiatry in the department of medicine and director of the division of psychosomatic medicine and associate physician to students at the medical center, $25,000; Dr. Arthur Kornberg, professor of microbiology and head of the department, $15,000; Dr. Paul Berg, instructor and American Cancer Society Scholar in Microbiology, $5,810; Dr. Irving Lieberman, instructor in microbiology, $7,000.

Others are: Dr. Alexis F. Hartmann, professor of pediatrics and head of the department, Dr. Miriam M. Pennoyer, instructor in pediatrics, and Dr. Frances K. Graham, instructor in medical psychology and research fellow in pediatrics, $20,000; Dr. W. Barry Wood, Jr., Busch professor of medicine and head of the department of internal medicine, $12,000; Dr. Albert B. Eisenstein, assistant professor of medicine and of preventive medicine and assistant physician to students at the medical center, $4,500; Dr. W. Stanley Hartroft, Mallinkrodt, professor of pathology and head of the department, $10,564 and $4,996; Dr. C. Barber Mueller, assistant professor of surgery and assistant dean, $6,450; and Dr. Warren H. Kempinsky, instructor in neurology, $3,000.

Dr. Stanley F. Hampton, assistant professor of clinical medicine, was elected president of the American Academy of Allergy at the academy's 11th annual meeting held recently in New York.

Dr. Robert F. Furchgott, associate professor of pharmacology, was awarded a grant in aid for heart disease research from the St. Louis Heart Association, local affiliate of the national organization, for continuation of his investigations at the medical school.

Dr. Mildred Cohn, research associate in biological chemistry, has received an Established Investigator Award from the St. Louis Heart Association. This will be the third consecutive year that the American Heart Association has provided funds for Dr. Cohn's research on how energy from digested food is transformed into muscular activity, with particular reference to muscles of the heart.

The annual Robert J. Terry lecture, established in 1938 and sponsored by Washington University School of Medicine, was given March 30 by Dr. Charles H. Danforth, professor emeritus of anatomy at Stanford University School of Medicine. His sub-

The Geriatric Diet strikes a happy balance!

Your elderly patient may narrow down his food range to the point where foods high in protein, vitamins, and minerals are virtually eliminated. These ideas may help you show him how to enjoy a better-balanced diet.

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ject was "The Scope of Anatomy." A member of the anatomy department of Washington University from 1908 to 1922, Dr. Danforth recently was awarded a citation for "outstanding achievements" by the university at its Second Century Convocation. In 1922 he joined the Stanford University faculty and served as professor of anatomy. He became head of the department in 1938, a position he held until his retirement in 1949. The lectureship honors Dr. Terry, professor emeritus of anatomy at Washington University, who introduced reforms in the teaching of human anatomy.

Dr. Alexis F. Hartmann, professor of pediatrics and head of the department, delivered the eighth annual Rudolph Matas lecture February 25 at Tulane University, New Orleans. He discussed "Pathologic Physiology in Some Disturbances of Carbohydrate Metabolism." The lecture, sponsored by the Nu Sigma Nu medical fraternity chapter, honors Tulane's emeritus professor of surgery for his contributions to international medicine.

Dr. Lauren V. Ackerman, professor of pathology and of surgical pathology, recently (March 5-19) spent two weeks in the Hawaiian Islands where he participated in a series of lectures on the various aspects of cancer. He also gave one non-technical address on "Cancer in Childhood." The trip was sponsored by the Hawaii Cancer Society, Inc.

One of the guest speakers at the recent (March 14-17) 24th annual spring clinical conference of the Dallas Southern Clinical Society was Dr. Carl A. Moyer, Bixby professor of surgery and head of the department. He discussed "The Clinical Signs Associated With Three Distinct Types of Fluid Disturbances"; "Chronic Vascular Ulcers and Post Ligation Syndromes of the Lower Extremities"; and the "Treatment of Burns." He also was an honor guest at several luncheons held by the Society.

A speech on vasomotor rhinitis was given by Dr. Theodore E. Walsh, professor of otolaryngology and head of the department, at the 76th annual meeting of the American Laryngological Association. The group met March 13 and 14 in Hollywood, Fla. Other faculty members of the medical school also attended the meeting.

Dr. Robert L. Lam, assistant professor of neurology, discussed "The Diagnosis of Brain Disease in Children" at a meeting of the Society of Mental Hygiene March 11 in Springfield, Ill.

Dr. Phillip H. Starr, assistant professor of psychiatry and of pediatrics and director of the Child Guidance Clinic, presented a paper on "The Triangular Treatment Approach in Child Therapy: Complementary Psychotherapy in the Mother-Child System" at the opening panel discussion of the national meeting of the American Association of Psychiatric Clinics for Children February 27 in Chicago. Other staff members of the Child Guidance Clinic who attended the meeting were: Dr. Saul Rosenzweig, professor of medical psychology; Dr. Paul H. Painter, instructor in clinical child psychiatry; Miss Mary Schulte, instructor in psychiatric social work; Mrs. Louise Rosenzweig, research assistant in medical psychology; and Mrs. Louetta Berger, a social worker.

ST. LOUIS UNIVERSITY

The St. Louis University School of Medicine Alumni will hold a dinner alumni reunion at the Ambassador Hotel on the boardwalk in Atlantic City, Wednesday, June 8 during the meeting of the American Medical Association. Dr. Gerald V. Stryker, director of the department of Dermatology, and president of the Medical Alumni Association announces that a dinner dance is being planned, and a School of Medicine Hospitality Room will be available to School of Medicine Alumni June 7 and June 8. Advance reservations may be sent to Medical Alumni Association, St. Louis University School of Medicine, 1402 South Grand.

Dr. Louis L. Tureen, assistant professor of clinical neurology and psychiatry, who is spending four and a half months under appointment at the Neurological Institute, National Hospital in London, England, has already visited Holland, England, Sweden and is currently lecturing in and touring Southwestern Germany before going on to Italy. Dr. Tureen attended a conference on psychosomatic medicine in Amsterdam and a meeting of the French Neurological Association in Paris in January. In England he made an exhaustive study of the rehabilitation program of chronic invalids and attended conferences with A.W.M.P. labor leaders, industrialists and doctors doing rehabilitation work. In Sweden he made a survey of the operations of the social state with special regard to housing, care of the old people, infant welfare and the program of industrial psychiatry. He also visited the institute of applied psychology, and the personnel advisory board of the Swedish Confederation of Industry and the Safety advisory board of the same organization. Dr. Tureen will complete his tour in May.

Dr. Charles B. Huggins, professor of Surgical Urology delivered the tenth annual Hanau W. Loeb Lectureship, sponsored by the Phi Delta Epsilon Medical Fraternity, held February 24 at the Saint Louis University School of Medicine. Dr. Huggins who spoke on "Relationship of the Steroids to Cancer" stated that steroid hormones are the hope of the future in the treatment of cancer. The lecture was followed by a dinner at Hotel Kingsway honoring Dr. Huggins, at which Dr. James W. Colbert, Jr., Dean, School of Medicine acted as toastmaster. The dinner was attended by School of Medicine faculty and members of the medical fraternity. The lectureship was established in 1946 in honor of the late Dr. Hanau W. Loeb, who served as dean of the School of Medicine from 1914 to 1927.

Dr. C. Rollins Hanlon, director of the Department of Surgery, attended a meeting of the Sixteenth Annual Meeting of the Society of University Surgeons at the Shamrock Hotel, Houston, Texas, February 10, 11 and 12. Dr. Hanlon is secretary of the group. He was elected to membership in the Chest Club and attended the group's meeting in Chicago February 20. He also attended the Biennial of Johns Hopkins Medical and Surgical Association February 23. Dr. Hanlon received his M.D. from Johns Hopkins University.

Dr. Robert M. O'Brien, professor of clinical orthopedic surgery and Chairman of the Department, attended the 1955 convention of the American Academy of Orthopaedic Surgeons held in Los Angeles, January 29 to February 3. As Chairman of the Committee on Audio Visual Education, Dr. O'Brien reviewed all the films shown at the convention.

Dr. Leonard Procita, instructor in pharmacology, School of Medicine, has been awarded a grant of

$2,120 by the St. Louis Heart Association. He is seeking knowledge of events that may take place during heart muscle contraction and relaxation and will use ryanodine, a highly toxic muscle poison to study heart failure.

Dr. Grayson Carroll, associate professor of clinical urology, and associate chief of staff, St. John's Hospital, will attend the annual meeting of the International Congress of Urology at Athens, Greece, April 10-18.

Dr. Alphonse McMahon, associate professor of internal medicine and Chief of Staff, St. John's Hospital, was presented the annual award for distinguished service to medicine and pharmacy given by the Alumni Association of the St. Louis College of Pharmacy and Applied Sciences on February 27 at the Jefferson Hotel. Dr. McMahon is past president of the Southern Medical Association and the St. Louis Medical Society.

Dr. Erwin E. Nelson, Director of the Department of Pharmacology, spoke before the St. Louis Academy of Science February 25. His subject was "The Change in Drugs in the Last 25 Years."

Rev. Edward T. Foote, S.J., Regent, School of Medicine, participated in a panel discussion on a St. Louis Medical Society Program February 1. Father Foote, who spoke on "Current Trends in the Practice of Medicine in the University Hospital" was on a panel with Dr. Carl A. Moyer, professor of surgery, Washington University School of Medicine.

UNIVERSITY OF MISSOURI

New Appointments. Dr. Walter J. Burdette, Professor of Surgery at Louisiana State University School of Medicine, New Orleans, La., will become Professor of Surgery and Chairman of the Department of Surgery, University of Missouri School of Medicine, on or about July 1, 1955. Dr. Burdette, a native of Hillsboro, Texas, holds an A.B. degree from Baylor University, an A.M. and Ph.D. degrees from the University of Texas, and an M.D. degree from Yale University. He received his postgraduate training in surgery at Johns Hopkins University and Yale University, and has been on the faculty of Louisiana State University School of Medicine in New Orleans since 1946. Dr. Clement E. Brooke, now at Arsenal, Arkansas, will become Instructor in Pediatrics at the University of Missouri School of Medicine on or about March 15, 1955. Dr. Brooke's special interests are infectious diseases. Dr. John M. Franz, presently at the University of Iowa, will become Instructor in Biochemistry at the University of Missouri School of Medicine, effective July 1, 1955.

Visitors. Dr. Frederick C. Robbins, currently Professor of Pediatrics, Western Reserve University School of Medicine, and 1954 Nobel Prize Winner in Medicine and Physiology, visited the campus of the University of Missouri on February 21, and gave two lectures during the day to the faculty and student body of the School of Medicine, and to a lay audience on "The Current Status of Poliomyelitis." Dr. Robbins, a native of Columbia, Missouri, received an A.B. degree from the University of Missouri in 1936, and a B.S. degree in Medicine from the University of Missouri School of Medicine in 1938. Dr. John F. Sheehan, Professor of Pathology, and Dean of Loyola

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University School of Medicine, Chicago, Illinois, visited the campus on February 23 and February 24.

Postgraduate Activities. On February 16, Dr. Roscoe L. Pullen, Professor of Medicine, and Dean of the School of Medicine, addressed the Jackson County Health Forum in Kansas City on "What's the Heart Story?" Dean Pullen also appeared on radio and television programs on station WDAF, Kansas City on the same date. His presentations were sponsored by the Jackson County Medical Society. On February 16, Dr. Robert L. Jackson, Chairman of the Department of Pediatrics, addressed the Greene County Medical Society, and participated in the Postgraduate Course in Springfield, Missouri, sponsored by the Greene County Medical Society and the University of Missouri School of Medicine. On February 17, the Fifth Postgraduate lecture for physicians in Central Missouri was held in Columbia with presentations by Dr. Clarence D. Davis, Chairman of the Department of Obstetrics and Gynecology, and Dr. William A. Sodeman, Chairman of the Department of Medicine. On February 25, and February 26, Dr. C. D. Davis, Chairman of the Department of Obstetrics and Gynecology, was guest speaker at the Postgraduate course in Obstetrics, sponsored by the University of Iowa, College of Medicine, Iowa City. On February 19, the University of Missouri School of Medicine, was host to the First Regional Meeting of the Missouri Chapter of the American College of Physicians, held in Columbia under the chairmanship of Dr. William A. Sodeman, Professor of Medicine. Doctor Sodeman and Dr. John H. Killough, Assistant Professor of Medicine, were guest speakers for the day. In spite of inclement weather, 77 members of the American College of Physicians in Missouri and many wives, attended the meeting. On February 17, Miss Dorothy L. Vorhies, Associate Professor of Dietetics, and Director of the Dietary Department, University Hospitals, appeared on KOMU-TV Guest Book Panel in connection with the Career Conference, sponsored by the women students of the University of Missouri. On March 3-5, Miss Vorhies attended a Continuation Course in Clinical Dietetics, offered by the University of Minnesota in Minneapolis. On March 7-10, Dr. William A. Sodeman was guest speaker at the New Orleans Postgraduate Medical Assembly, New Orleans, La. On March 9, Doctor Sodeman received the keys to the City of New Orleans and was made an Honorary Citizen of New Orleans by Mayor deLesseps Morrison of the City of New Orleans. Doctor Sodeman also gave the Phi Beta Pi Lectureship at the University of Alabama, Birmingham, March 4, and the Phi Beta Pi Lectureship at the Louisiana State University, New Orleans on March 8, 1955. On March 10-13, Dr. Robert L. Jackson, Chairman of the Department of Pediatrics, and Dr. W. R. Hepner, Jr., Associate Professor of Pediatrics, attended the Regional Conference of the American Academy of Pediatrics in Little Rock, Arkansas. On March 6, Dean Roscoe L. Pullen appeared simultaneously on the radio and television station KWK-TV, St. Louis, Missouri, as a member of a panel discussion on "Rural Medicine." On March 8 Dean Pullen addressed the Lafayette-Ray County Medical Society in Lexington, Missouri on "Progress of M.U. School of Medicine." On March 15, Dr. Thomas H. Alphin, Associate Professor of Anatomy and Assistant Dean of the School of Medicine, addressed the Pettis County Health Forum in Sedalia, Missouri on "Recent Progress in Medical Science."

A Second Century Convocation

(Continued from page 371)

Evolutionary changes add pertinence to that requirement. Missouri has attracted students of high quality from all parts of the nation as well as from abroad. Congestion in living quarters has increased. In contrast with earlier years, and a change of debatable merit, a substantial percentage of students are married and many have children. All schools seek to enroll the better qualified individuals, and in that group there may be wider choice of institutions. There have been times when sought for students elected to go elsewhere due to better living conditions. The possibility for keeping these individuals in Missouri medicine is lessened with graduation at other places. Mention should also be made of increasing complexities in curriculum. Transition from liberal arts to medical training is both tedious and difficult. The task can be lessened by continuity in the academic influences of dormitory life.

Education is our most vital and inexhaustible resource. As with all endeavors, however, it requires replacement, modernization and fertilization. Washington University chose as the theme of its Second Century Convocation the very spark of American life and history: "We cannot afford to lose the Blessings of Liberty."

Medical Journalism for Medics

(Continued from page 371)

Realizing this and sensing the need for improvement in medical writing, the American Medical Writer's Association recently was instrumental in establishing courses in medical journalism at three midwest state universities, the Universities of Missouri, Illinois and Oklahoma. Briefly, the plan exposes the journalism student to selective medical school courses and gives him a better insight into his future writings relative to problems and personalities in the field of medical sciences.

May we suggest carrying the plan a little farther by reversing the process and thereby exposing the medical student to selective journalism subjects so as to make his future medical writings more interesting, expressive and instructive. His journalism training could be included in his premedic years as required instead of elective courses.

A combination of both methods would not only provide better medical journalism, but would also ultimately become paramount in establishing better public relations.

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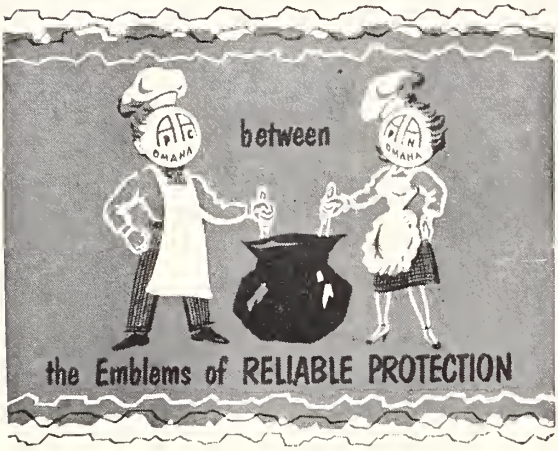
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Missouri Academy of General Practice

(*Continued from page 334*)

will either not be acceptable or will be withdrawn from the legislature.

Sixty plus per cent of all M.D.'s are doing general practice. A larger per cent of Osteopaths are engaged in general practice, hence our general practice medical group are definitely more concerned with this bill and with the reaction on the public than may be our specialist friends. It will be difficult for us to accept the fact that these men can refer patients to the same specialists to which we now refer. It will be difficult for some of us to feel the same toward those men who actively encourage them to compete with us in our home communities, but after we lay aside our petty prejudices we must be bound by this conclusion that anything that improves the general health of the community in which we live and in which our families are reared is going to help us eventually. Furthermore we should all be civic minded enough and selfless enough to want the best for our community. Therefore I think it behooves the majority of those of us in general practice to be in favor of this bill which we think will improve the health standards of the state of Missouri.

Musings

(*Continued from page 372*)

University of Missouri School of Medicine; Dr. Andy Hall, Mount Vernon, Illinois, "Doctor of the Year" in 1949 and yours truly.

Mr. Justin L. Faherty, director of civic affairs for the stations and assistant to the publisher of the *Globe-Democrat*, served as moderator. Mr. Faherty came armed with a number of questions concerning rural medical practice that members of the panel were asked to discuss. Time on this program was given to publicising the health forums on March 13, March 20, March 27 and April 3.

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Book Reviews

Diseases of the Skin, For Practitioners and Students by George Clinton Andrews, M.D., F.A.C.P., Clinical Professor of Dermatology, College of Physicians and Surgeons, Columbia University; Attending Dermatologist to the Presbyterian Hospital, Columbia; Presbyterian Medical Center, New York. Fourth Edition with 777 Illustrations. W. B. Saunders Company, Philadelphia. 1954. Price $13.00.

Andrew's "Diseases of the Skin," 4th edition, follows the general plan of previous editions but it has been carefully revised. Some of the material has been condensed so that in spite of some new features this edition contains sixty less pages. The chapters on acne, nevi and neoplasms of the skin are excellent and special attention has been given to those tropical dermatoses which occur in South America. Histopathology is discussed with enough detail to satisfy the most experienced dermatologist.

Some minor criticisms may be mentioned although they do not detract from the general excellence of the book. This reviewer does not prescribe ointments for tinea cruris because of the danger of irritating the scrotal skin. The use of 5 per cent chrysarobin in benzine for this condition is not mentioned. The use of x-ray in the treatment of acute vesicular dermatophytosis may also be criticized since in my experience generalized reactions have not been uncommon. Lotio alba which Andrews recommends for rosacea is rarely tolerated and mildly astringent lotions must be employed. In the treatment of nummular eczema, cortisone ointments are not mentioned. The statement that "cortisone and ACTH will sometimes clear up chronic x-ray ulcers" will be a surprise to many dermatologists. Also that blood transfusions may cure some cases of universal alopecia.

Two warnings that should be read and followed by all general practitioners are (1) treatment of acute poison ivy with poison ivy extract should be discouraged because of the danger of autosensitization, and (2) the use of cortisone and ACTH in acute dermatitis should be discouraged because improvement may be temporary and followed by a severe relapse when the drug is discontinued.

The indexes are complete, the photography generally excellent and the general appearance of the book is a credit to the author and publisher. N. T.

The Allergic Child by Harry Swartz, M.D. Coward-McCann, Inc., New York. 1954. Price $3.95.

Although this book is intended primarily for the parents of allergic children, it can be read advantageously by the physician. It is designed primarily to educate the parent, giving him insight about the basic cause, excitants, personality of the child and natural course of the illness. Since the exposition is complete it might also serve as a textbook of the allergic disease. One of the most striking parts of the book is the preface, which forcefully calls attention to the fact that, although the allergic disorders of childhood are almost always completely reversible, they eventually become irreversible if uncared for. C. J. S.

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MISSOURI MEDICINE

The Journal of the Missouri State Medical Association

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  General Surgery, One Week, May 23, October 17
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Curiosa et Trivia

William B. McCunniff, M.D.

The Narcotics Bureau reports that in 1954, illegal sales of paregoric caused more trouble than any other violation committed by druggists. Texas pharmacists led the list of convictions.

The Papyrus of Ebers, dating from 1550 B.C., contains references relating to specialism in diseases of women.

Carbolic acid contains no acid; chemically, it is a base.

An old Chinese manuscript, dating from the third century, reports that a physician, Hao-tho, gave his patients a preparation of hemp, whereby they were rendered insensible during the performance of operations.

Almost 40,000 persons die of snakebite each year. The highest death rate is in Burma, where 15.4 people per 100,000 population succumb.

. . . and getting less *Trivia* by the day: wound infections in clean surgical wounds increased from about 1 per cent in 1949 to nearly 4 per cent in 1953—presumably due to the development of a carrier state in hospital personnel of penicillin resistant organisms.

Under normal circumstances, ciliary action is capable of driving inert material from deep segments of the lung toward the larynx at a velocity of four feet per hour.

Not a bad return on an investment: experiments at Iowa State show that a cattle feeder can market about one hundred pounds extra beef by the addition of about $1.25 worth of stilbestrol to the feed.

Medical Economics reports that contrary to popular opinions, doctors do not drive high priced cars. Fourteen per cent of physicians drive Fords, between 10 and 12 per cent drive Buick, Oldsmobile, Chevrolet or Chrysler, and 8 per cent drive Cadillacs. But for the edification of G.M. stockholders, 50 per cent of physicians drive General Motors cars, 22 per cent Chrysler cars, and 19 per cent Ford line cars. Regardless of make, sedans are the favorite body style, with hard-tops second, and the favorite color (for reasons obvious to this writer) is green.

For an abrupt conversation-stopper, consider this question asked by a steel-worker returning to work after having had his hip nailed: "What happens to me (and my nail) when I'm working in the field of an electro-magnet?"

Capsule Clinics

Irving A. Wien, M.D.

- Hemochromatosis (bronzed diabetes) is a condition of unknown etiology in which the iron stores are vastly increased and in which there is portal cirrhosis of the liver. Diabetes, pigmentation of the skin, and pancreatic fibrosis are frequently, though not invariably, present. Aufderheide, A. C., *et al.*: Blood, J. Hematol. 8 (September) 1953.

- A prostatic abscess may appear as a single large abscess or as several small foci, and the path of least resistance for rupture of the abscess is toward the urethra. Thorek, P.: Anatomy in Surgery, J. B. Lippincott Co., Philadelphia, 1951.

- The increase in mortality accompanying obesity justifies, it seems, calling obesity the "Number One Nutrition Problem" and perhaps even the "Number One Public Health Problem" in Western countries at the present time. Mayer, J.: Physiol. Rev. 33 (October) 1953.

- Peridontosis is replacing the older, more inaccurate term "pyorrhea"; it consists of vertical pocket formation and horizontal loss of supporting tissue around the teeth. It is the most important cause of the loss of teeth. Guion, J. H.: Southern Gen. Prac. 115 (July) 1953.

- Anaphylactic shock due to penicillin reaction is apt to occur 15 to 25 minutes after the intramuscular injection of this medicament. Accurate histories of penicillin reactions or allergy will help avoid this unfortunate complication. Hamner, J. L.: Southern Gen. Prac. 115 (July) 1953.

Entered as second-class matter, February 18, 1925, at the post office at Fulton, Missouri, under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917. Publication Office: 1201-5 Bluff Street, Fulton, Missouri. Editorial Office: 634 N. Grand Ave., St. Louis 3, Mo. Subscription Price: $3.00 Per Year. Printed by The Ovid Bell Press, Inc., Fulton, Missouri.

Missouri Academy of General Practice

KENNETH GLOVER, M.D.

The American Academy of General Practice Assembly which was held in Los Angeles the last of March had a total registration of 6,080, which included some 4,000 doctors.

The Congress of Delegates assemblies were well attended and were quite busy transacting the work before it. In consideration of resolutions presented by the various state academies, the paramount problems concerned hospital programs, hospital organizations to include general practice sessions, postgraduate study requirements and these presentations to the various areas of the country. A change also was made in the fees for members beginning practice. The overall picture is that of a rapidly growing organization quite concerned with two major considerations: That of improving the postgraduate studies of its member physicians and having them receive, on hospital staff, positions of recognition based upon individual abilities. None are concerned with assuming places which unquestionably belong in the realm of specialists, but are jealous of being pushed aside by one with a specialist rating who can do no better work than that of the general practitioner.

The new president of the American Academy of General Practice is Dr. John R. Fowler, of Massachusetts. The new president-elect is Dr. Jack S. DeTar, Milan, Michigan, who has just completed a term of speaker of the Congress of Delegates. The new speaker is Dr. James Murphy, Fort Worth, Texas, and the vice speaker is Dr. D. P. Harvey, Glasgow, Kentucky. Dr. Holland Jackson, Fort Worth, is still treasurer. The new members of the board of directors are Dr. Fount Richardson, Fayetteville, Arkansas; Dr. William McKinley, Washington, and Dr. Charles Cooper, of Minnesota. The executive secretary, Mr. Mac Cahal and his office staff, of Kansas City, were complimented highly on their organizational plans for the meeting and of their administrative work throughout the preceding year. As Mr. Cahal is an attorney with experience in administrative work, he has proved himself not only capable but has wisely chosen his assistants.

The total membership of this relatively young organization, only seven years old, is expected to reach 20,000 within a few months in spite of the loss of some of its members who have not kept up with the postgraduate training courses.

Crossroads Comment

PETER V. SIEGEL, M.D.

Dear Auntie Helen:

Notice that the obituary columns havent given much publicity to the death of S.B. (Senate Bill) 226. Guess maybe most people think she died a natural death. Such a pity too because she really had all the makings of a good deal. Whats that old saying about the good dying young. Not so here—she never even got started.

To those who just scan the news and many who were just not interested enough to look under the shroud it may have seemed a natural death, doomed from the start. Somehow I get the feeling that not very far under the surface are some causes with obvious premeditated homocidal intent. Course any fair minded person excuse some of the opposition because their life was threatened. We drew first, maybe before we were loaded, primed, and cocked, and got it in the end.

Anyhow, I think a real good postmortum is indicated just for the record. I always find that hindsight sharpens my foresight, and since we know we are bound to see another case like it we can be brushing up on our therapeutics. Now dont misunderstand, I aint saying that it wasnt treated right in the first instance. Now that we know we cant eat high on the hog from the start lets be content to chew a little lower.

A good start would be to call in another consultant. We all do that all the time in our own practice. It just could be that we had a smidgen of bad advice from the start. It just dont make sense to me that she slipped away because all of us old country boys didnt whoop it up like a holy roller meeting. If that is really what her life depends on then lets forget the whole thing because I dont think many of us have that leaning.

Since fortune tellers, faith healers, and naturepaths practice anyhow why not let them. There is an element of the public that desires that sort of thing. Lets just make for durn sure that no new ones start. Else first thing you know the Smithton School of Nuclear Medicine will offer a course of Atom Medicine in ten easy lessons (or a short course of one hard one) complete with a box of atoms and a counter attached to the diploma.

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Your Nephew,
PETE

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Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

The Fifty-Eighth Annual Meeting: With the close of the St. Joseph meeting on May 12 probably the most successful annual gathering of the organization passed into history. The scientific program received much praise from the members. Although somewhat crowded the program was completed without annoying interruptions. There were thirty-seven papers on the program exclusive of the president's address. Seven essayists failed to respond when their names were called, leaving twenty-nine papers that were read; of these all except three were discussed quite thoroughly. The sessions lasted until 6 o'clock on Tuesday and Wednesday, but the absence of night sessions left the members free to enjoy the evenings according to their own inclinations.

In electing the president only one candidate was nominated, Dr. C. R. Woodson, St. Joseph, and he was elected by acclamation. Subsequently some members discovered that Dr. Woodson carried an advertisement in the St. Joseph newspapers and at the General Meeting on Wednesday, May 12, Dr. Woodson made a statement concerning this advertisement. This statement was on motion referred to the Judicial Council. On Wednesday, May 19, the Judicial Council met in special session and after a hearing declared the office of president vacant and elected Dr. C. B. Clapp, Moberly, one of the vice-presidents, to act as president, in accordance with the constitution and by-laws.

Excelsior Springs was selected as the place for the next meeting.

The State Secretary's report showed 2,521 members paid up and in good standing on May 10, out of a total membership of 3,189. Since then 60 other members paid, making 2,581 members in good standing.

Now the innominate bone has been found out. So mysterious was this portion of the bony framework of the body to the ancients who attempted medical nomenclature that they could find no suitable name for it and so it became the "no name" bone. Along comes an osteopath who says it should be called the suicide bone, or blue devils bone, or something of that kind, because suicides not otherwise accounted for have a twist in the innominate. Coroners, please take notice.

TWENTY-FIVE YEARS AGO

The announcement by Dr. E. A. Doisy at the thirteenth annual Physiological Congress in August, 1929, of the isolation of a follicular hormone has given rise to so many personal problems for Dr Doisy and so many administrative problems for St. Louis University that effective measures had to be devised for dealing with them.

On February 7, Dr. Doisy and his coworkers, Clement D. Velver and Sidney A. Thayer, had assigned to St. Louis University patent rights which may be thought wise to secure in order that the difficulties just enumerated might be properly met. The terms of the donation provide that the eventual income, if any, is to be used entirely for the prosecution of research in the School of Medicine.

The American Medical Association recognized Dr. Doisy's right to name the newly isolated compound and has approved of the name "Theelin" for this follicular hormone.

Dr. John R. Brinkley, Milford, Kansas, so-called "goat-gland" specialist, has been served with a writ directing him to show cause why his license to practice medicine should not be revoked. He is ordered to appear before the State Board of Medical Registration and Examination of Kansas, June 17. The accusations include gross immorality and unprofessional conduct. The complaint was filed by Dr. L. F. Barney, Kansas City, Kansas, retiring president of the Kansas Medical Society. With characteristic effrontery, Dr. Brinkley tried to defeat the action of the board by an injunction on the ground that the law which empowered the board to revoke his license was unconstitutional. Judge George H. Whitcomb granted a hearing on the application for an injunction on May 16. After the hearing Judge Whitcomb denied the petition for a permanent injunction.

Dr. Lewis A. Conner, New York, professor of Medicine, Cornell University Medical College, spoke before the St. Louis Medical Society, May 20. He is one of the founders and first president of the American Heart Association, and editor of the *American Heart Journal.*

The new X-ray vaults at the City Hospital, St. Louis, built after the Cleveland Clinic disaster, successfully withstood a fire test recently.

TEN YEARS AGO

Legislation: H. B. No. 138, introduced by all representatives from Jackson County and Dr. J. A. Gray of Atchison County, provides that the Board of Curators of the University of Missouri shall establish a four year school of medicine at

(Continued on page 412)

spares intestinal flora . . .

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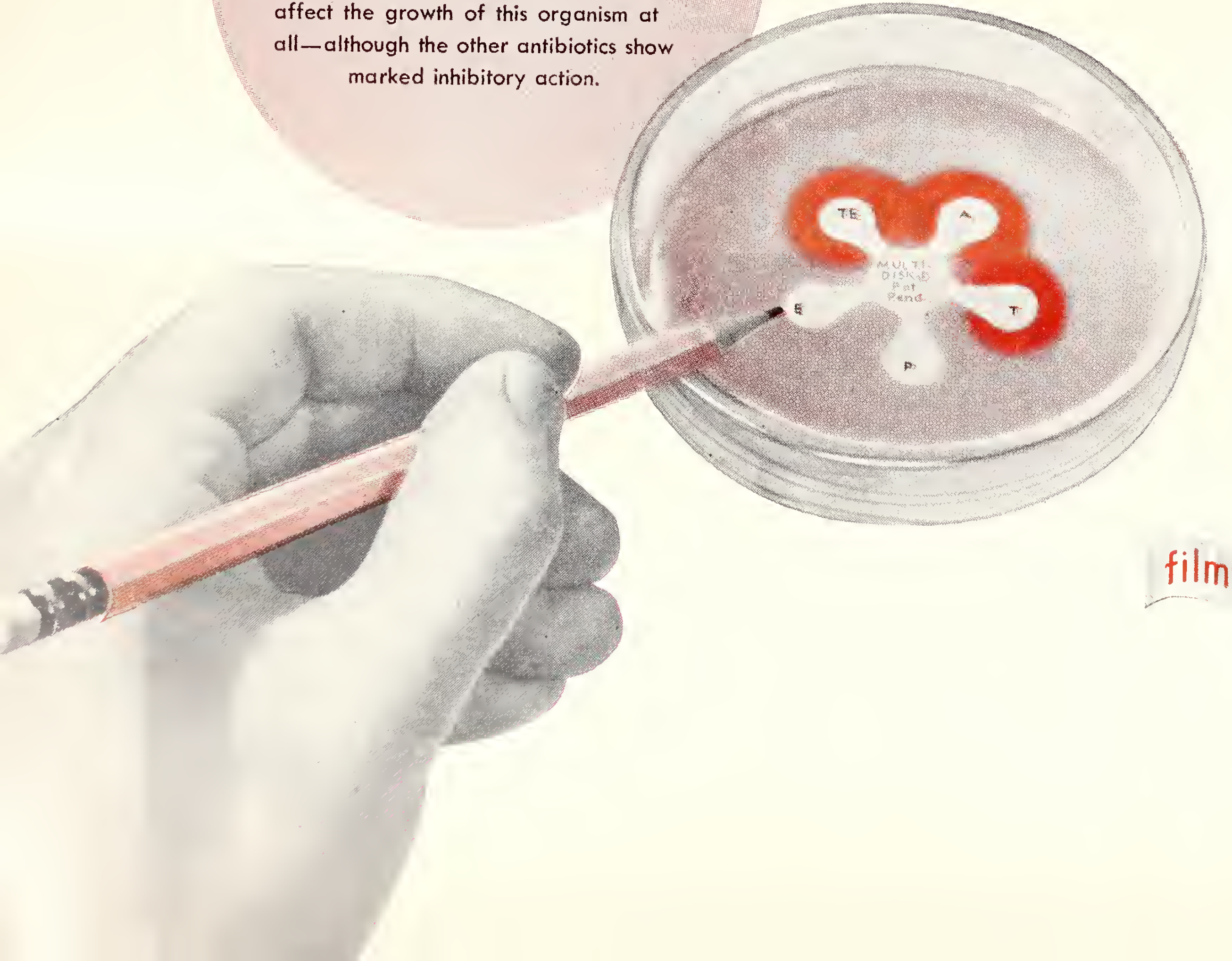

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Woman's Auxiliary

Mrs. Frank B. Leitz, *President*

A recent letter from Mrs. George Turner, President of the Woman's Auxiliary to the American Medical Association, begins with a quotation from the work of Marcus Aurelius: "When thou wouldst cheer thy heart, think upon the good qualities of thy associates; as for instance this one's energy, that one's modesty, the generosity of a third and some other good trait of a fourth. For nothing is so cheering as the images of the virtues mirrored in the characters of those who work with us, presenting themselves in as great a throng as possible. Have these images, then, ever before thine eyes."

This month we recognize and acknowledge the energy, modesty, generosity and other good traits of our thirty-one county auxiliary presidents. Without these worthy women, who, with the help of their officers, chairmen and members, carry out the plans of those who now serve at the state level, there would be no real reason for our state organization.

Our county president list follows:

Audrain, Mrs. William H. Jolley, 406 Woodlawn, Mexico.

Boone, Mrs. John C. Tinsley, Jr., 309 Fredora, Columbia.

Buchanan, Mrs. T. E. Potter, 2604 Pacific St., St. Joseph.

Butler-Ripley-Wayne, Mrs. Robert C. Engelhardt, 1322 Meadow Lane, Poplar Bluff.

Cape Girardeau, Mrs. Thomas G. Otto, 511 Alta Vista, Cape Girardeau.

Clay, Mrs. James E. McCormick, 309 Northcrest Dr., Kansas City 16.

Cole, Mrs. John S. Sennot, 102 Douglas Dr., Jefferson City.

Cooper, Mrs. William Abele, Boonville.

Dunklin, Mrs. W. D. English, Cardwell.

Franklin-Warren-Gasconade, Mrs. Ludwig C. Muench, Washington.

Grand River, Mrs. Howard Carter, 6th and Davis Sts., Hamilton.

Greene, Mrs. Stanley S. Peterson, 721 Stanford, Springfield.

Jackson, Mrs. Raymond L. Morrow, 17 W. 69th St., Kansas City 13.

Jasper, Mrs. Eugene H. Hamilton, 615 N. Pearl, Joplin.

Jefferson, Mrs. Karl V. McKinstry, DeSoto.

Johnson, Mrs. T. Reed Maxson, 420 E. Market St., Warrensburg.

Lafayette-Ray, Mrs. Jordan Keeling, Waverly.

Marion-Ralls-Shelby, Mrs. Daniel B. Landau, 2901 Pleasant St., Hannibal.

Miller-Morgan-Moniteau, Mrs. Robert R. Lyle, Versailles.

Mineral Area, Mrs. C. E. Carleton, Jr., Farmington.

Nodaway-Atchison-Gentry-Worth, Mrs. Benjamin F. Byland, Maryville.

Ozarks, Mrs. Kenneth Glover, Mount Vernon.

Perry, Mrs. S. G. Legner, 124 S. Edward St., Perryville.

Pettis, Mrs. J. W. Boger, 1601 W. 3rd St., Sedalia.

St. Louis City, Mrs. Edmund S. Beckette, 65 Crestwood Dr., St. Louis 5.

St. Louis County, Mrs. Maximilian Weitman, 3530 Arsenal St., St. Louis 18.

Saline, Mrs. Ralph Jones, 1069 S. Redman, Marshall.

SEMO, Mrs. Audra Smith, Sikeston.

South Central, Mrs. Claude W. Cooper, Thayer.

Mid-Missouri, Mrs. H. H. Davis, Salem Ave., Rolla.

West Central, Mrs. Paul Barone, Nevada.

Missouri Medicine in Review

(Continued from page 408)

the University of Missouri, the last two years to be established in Kansas City. After the bill had been killed by the House Committee on University, it was voted upon favorably by the committee of the whole House.

Lt. Col. William J. Shaw, Fayette, has been made a Colonel. Col. Shaw is now serving in the South Pacific as head of the 29th Evacuation Hospital.

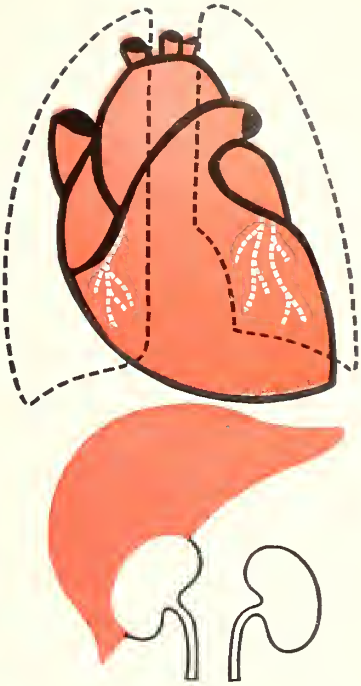
Major Jean J. Merz, St. Louis, has received the Purple Heart. He was wounded while stationed in Luxembourg during the German break-through.

Lt. Col. Brian Blades, St. Louis, was among a group of chest surgeons credited in a War Department report with improving the technic of thoracic surgery.

Harmon General Hospital at Longview, Texas, has been designated for the treatment of tropical diseases. The only other Army tropical disease center is Moore General Hospital at Swannanoa, North Carolina.

Captain Paul R. Wright, Kansas City, has been awarded the Bronze Star for work as a Y-Force medical officer supporting a Chinese division in the Salween Campaign of Western Yunnan.

Lt. Col. James Barrett Brown, St. Louis, chief of plastic surgery at Valley Forge General Hospital, Phoenixville, Pa., was promoted recently to the rank of Colonel.



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Pettis County Pot Pourri

C. Gordon Stauffacher, M.D.

I was late and my wife somewhat exasperated asked, "And where have you been for the last two hours?"

I sighed wearily and replied, "I met Mrs. Brown on the street and made the mistake of asking how she was feeling."

Definition: An abortion in Czechoslovakia is a cancelled Czech.

I had just done a rectal examination on 4 year old Robert when he told his Mother—"I didn't cry when I had my oil checked, did I Mother?"

I find that my yearly income runs into four figures—my wife and three daughters.

A patient was complaining about her bill being unreasonably high.

"Don't forget," I reminded her, "that I made twelve visits to your home while your son had the measles."

"And don't forget," she countered, "that he infected the whole neighborhood."

Our hospital refers to accidents as its bumper crop.

A pregnant woman patient of mine complained of an aching sensation in the vulvar region. After examining her I told her the cause was varicose veins of the vulva.

"But what can you do for them?" she exclaimed, "I certainly can't wear an elastic stocking there!"

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Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 52 June, 1955 Number 6

The Acute Abdomen

PHILIP THOREK, M.D., *Chicago, Illinois*

Acute emergencies within the abdomen will always rank high if not first among those conditions which tax the skill of the general practitioner and specialist alike. It is an inescapable fact that the more accurate the diagnosis the lower will be the morbidity and mortality. To enumerate the sixty or seventy conditions which might be encountered in acute abdominal emergencies is merely a display of cerebral muscle. After pondering over much statistical data one is impressed by the fact that only seven conditions account for from 90 to 95 per cent of the pathology which makes up such emergencies. These seven conditions are:

1. Acute appendicitis.
2. Perforated peptic ulcer.
3. Acute cholecystitis.
4. Acute salpingitis.
5. Acute hemorrhagic pancreatitis.
6. Renal colics.
7. Acute coronary disease (without apologies).

Those conditions which constitute the remaining 5 to 10 per cent are too numerous to mention and cannot be discussed in a paper of this length. Space will only permit the mentioning of a few highlights pertaining to each of the seven conditions enumerated; the discussion will be kept of practical rather than theoretical importance.

ACUTE APPENDICITIS

Probably the three most dangerous words that any physician may utter are: "Only an appendix." The more one encounters this condition the more one realizes that it may present itself in a variety of bizarre forms. Despite modern chemotherapy, acute appendicitis still accounts for thousands of deaths annually. These possibly avoidable deaths might well be due to procrastination, purgation and poor surgical judgment. The physician is well aware of the fact that any diffuse epigastric distress which localizes to the right lower quadrant within twenty-four hours is acute appendicitis until proved otherwise. The patient unfortunately does not use such terminology, hence, the "Two Question Test" has been devised and has been found to be simple, accurate and extremely helpful. The test is conducted in the following way:

Question Number One: "Where was your pain when it started?" The patient points to his entire abdomen.

Question Number Two: "Where does it hurt you now?" He then points to the right lower quadrant, usually McBurney's point.

It is unfortunate that anorexia has not been stressed as the most common symptom associated with acute appendicitis. I fear diagnosing acute appendicitis in any patient who states that he is hungry. Anorexia, nausea and vomiting are three degrees of one symptom, being dependent upon the amount of distention in the appendix. Since all appendices, when acutely inflamed, are at least theoretically distended, then all patients with appendicitis should present a loss of appetite. When the distention within the appendix is marked, the patient complains of nausea or vomiting. Fever is usually absent in early appendicitis. When the temperature rises above 100° F. peritoneal soiling rather than appendicitis per se is diagnosed. This of course does not pertain to children who may have a high fever in the presence of almost any early lesion.

Acute appendicitis does not produce right rectus rigidity. Although the reverse has been taught, it nevertheless is a fact that it is impossible to contract one rectus muscle without contracting the other. Only if an underlying mass is present is it possible for one rectus to feel rigid. When both recti react to pressure this is muscular defense and not rectus rigidity. The importance of making this distinction is understood when one realizes that the entire course of treatment may be altered by the presence or absence of an appendiceal mass.

From the Departments of Surgery, University of Illinois, Cook County Graduate School of Medicine, Cook County Hospital, American Hospital, and Alexian Brothers' Hospital.

Presented at the 97th Annual Session of the Missouri State Medical Association, March 27-30, 1955, Kansas City.

Many signs and tests have been described under the heading of acute appendicitis but these are too numerous to mention and of too little practical value. Bidigital examination (one finger in the vagina and one finger in the anal orifice) whenever possible is preferable to rectal or bimanual examinations. By means of the bidigital examination the examiner is oriented immediately and does not confuse cervix, feces, adnexae or appendiceal masses. The usual laboratory tests which are helpful are routine blood counts and urinalyses; the differential blood count is probably the most informative.

Treatment.—Modern chemotherapy has altered the treatment of acute appendicitis somewhat, however, two schools of thought still exist. One group believes that this condition should be treated surgically whenever and wherever possible; the other group advocates conservative therapy in the so-called late or neglected case. A middle of the road type of therapy has been utilized which incorporates some of the tenets of both groups. It is mandatory to remove a leaking focus from within the peritoneal cavity, however, there are times and conditions which make this impossible. The treatment herein advocated is presented in chart form. This does not apply to children since they have not acquired an immunity with which to combat the infection nor have they an omentum well enough developed to aid in localization. Therefore, children should be operated upon whenever the condition is diagnosed.

PERFORATED PEPTIC ULCER

Although recent studies tend to show that this condition is becoming more frequent in females it nevertheless appears to be a condition which the male is particularly heir to. In my practice it has been most unusual to see a perforated peptic ulcer in a female. The classical picture of the sudden onset of agonizing pain with board-like rigidity and a shock-like syndrome is too sophomoric to bear repetition.

The following highlights should be emphasized. Abdominal auscultation is of distinct value in the diagnosis of any spreading peritonitis, particularly in the case of a perforated peptic ulcer. As the peritoneal soiling spreads, the intestinal sounds diminish. The phrase, therefore, has been coined "the wetter they are the quieter they are." This simple finding is of inestimable value. It is unusual to see a case of perforated peptic ulcer in which normal bowel sounds are heard. Another sign which helps to clinch the diagnosis is the demonstration of a spontaneous pneumoperitoneum. This results when the stomach air bubble (magenblase) makes its exit through the perforation and into the peritoneal cavity.

Exceptions to every rule are of particular importance; the forme fruste ulcer is such an exception. This term refers to a pin-point perforation which immediately seals and prevents any appreciable spillage and soiling of the peritoneal cavity. Because of this the characteristic signs and symptoms are lacking and such a patient, despite the fact that he has a perforated peptic ulcer, may walk into the doctor's consultation room. However, after obtaining an accurate history and conducting a meticulous physical examination, even such minimal perforations can be diagnosed.

Duodenal or gastric contents may escape and leak downward along the so-called paracolic gutter of the ascending colon and pool around the appendix. This would result in pseudo McBurney point tenderness causing an erroneous diagnosis of acute appendicitis and an unnecessary removal of a red looking but, nevertheless, innocuous appendix. In such cases the perforated ulcer usually continues to leak and death may ensue.

Treatment.—Although there is a tendency of late on the part of some to advocate conservative treatment for perforated peptic ulcer the consensus of opinion still leans toward early closure of the perforation. Conservative treatment is reserved for those cases which are seen twenty-four hours post-perforation.

ACUTE CHOLECYSTITIS

That certain types of people are predisposed to certain types of diseases in a dictum that cannot be denied. The seven "F" type of person describes the usual gallbladder patient. She is the "Fair, Fat, Fertile, Flatulent, Flabby Female of Forty." There is no dogma in medicine, hence, practically any type of person may acquire any type of disease. One does not feel quite as chagrined in overlooking the rare as he does when the apparent is completely missed.

The pain which is associated with an attack of acute cholecystitis may be either constant or colicky; constant pain is due to continuous pressure upon nerve endings but colicky pain is caused by obstruction. This is an important differentiation to make since therapy differs greatly when one is treating a strictly inflammatory lesion or one associated with obstruction. The patient with an acute gallbladder who presents continuous pain may be tided over the acute phase on a conservative regime, whereas operative therapy in an obstructed condition becomes mandatory. It should be emphasized that gallbladder pain does not radiate to the right shoulder but rather follows the course of the seventh intercostal nerve and, therefore, radiates to the tip of the right scapula or the interscapular area. Any pain that radiates to the shoulder suggests an irritation of the phrenic nerve (04); this is usually caused by peritonitis with subphrenic contamination.

Although pain, a symptom, may be referred anywhere along its nervous path, tenderness, a physical finding, remains at the site of pathologic condition. Tenderness in acute cholecystitis is usually present in the right upper quadrant close to the right costal arch. Should such tenderness be at a lower level it can only be considered gallbladder pathology if the normal tympany to percussion in the right upper quadrant is replaced by flatness.

Treatment.—Whether to operate on an acute gallbladder or not is still a moot question. It is far better to permit the acute inflammation to subside and then do an elective cholecystectomy in a non-edematous and non-hyperemic field; this however is not always possible. I have found it helpful to consider the following five questions and in this way to determine whether conservative therapy or operative intervention is the treatment of choice:

1. Is the pain continuous or colicky (discussed previously)?

2. What sort of risk is the patient?

Although some patients chronologically are 40 years of age, anatomically they may be closer to 50 or 60 years of age. The risk must be evaluated carefully to determine the type of therapy.

3. How many attacks has the patient had previously?

The result of all inflammation is cicatrization. Scar tissue has a poor blood supply and few or no elastic fibers. If the patient has had numerous attacks it is safer to operate, whereas, if it is a first or second attack, conservative therapy should be considered seriously.

4. What is the duration of the present attack?

Patients with acute gallbladder disease seen within the first six to twelve hours may respond well to surgical treatment; patients with acute cholecystitis of more than twenty-four hours and surely more than forty-eight hours are better treated medically if possible.

5. What is the progress of the present attack?

Temperature, tenderness, distention, pain, vomiting and numerous other signs and symptoms are all helpful in determining whether the patient is presently improving or getting worse. The simplest method of answering this question is by checking and charting the pulse very hour on the hour. If the pulse rises 20 beats within an hour and continues to rise this speaks for spreading and soiling and warrants surgical intervention.

True it is that these five questions do not offer a simple yardstick to determine operability, however, each of these phases must be carefully considered and in only this way can the question as to proper therapy be answered.

ACUTE SALPINGITIS

This condition appears immediately before, during or immediately after the menstrual period. It is most unusual for acute salpingitis to flare up in the inter-menstrual period. As a rule those pelvic conditions which appear during the middle two weeks of a given menstrual cycle are usually the results of ovulation and have been referred to as mittelschmerz. Although the results of previous tubal inflammations may be seen in women past the menopause an actual acute salpingitis seen post-menopausally is a rarity. The abdominal tenderness is usually bilateral and supra-symphyseal. Bimanual and bidigital examinations will reveal marked tenderness on moving the cervix, swollen tender tubes or adnexal masses.

A positive smear (cervical or urethral) is pathognomonic; however, a negative smear does not rule out the possibility of salpingitis. Since acute appendicitis and acute salpingitis may assume typical forms, this differential diagnosis shall always remain difficult.

ACUTE HEMORRHAGIC PANCREATITIS

In the light of present knowledge concerning the pancreas, it is not too unusual to correctly make a diagnosis of acute pancreatitis preoperatively. Those people predisposed to gallbladder disease are similarly predisposed to pancreatitis. The exact cause or causes of this condition are unknown. It is believed that any agent or agents which might activate the pancreatic enzymes within the pancreas, particularly trypsinogen to trypsin, might precipitate such an attack. Such causative agents might be presented in the form of the following alliteration: Bacteria, Blood, Bile, Body juices and Booze. Any or all of these seem to have some part to play in the etiology of pancreatitis, especially if there is a communication or common channel between the common and pancreatic ducts.

It is well known that a milder form has been referred to as acute edematous pancreatitis, however, in the severe hemorrhagic (necrotizing) type, shock or a shock-like syndrome is present. The tenderness is diffuse and the rigidity is often board-like. A particular type of pain may be present and, if so, will impress the keen observer immediately. This pain is aggravated when the patient is on his back and is relieved markedly when the patient assumes a sitting or upright posture. These patients may even be found in the prone position. Whenever a patient with an acute abdominal condition prefers to assume a sitting position, a pancreatic lesion must be the first to be excluded. The serum enzyme tests are helpful, particularly the serum amylase within the first seventy-two hours. It must be recalled that morphine may also produce an elevated serum amylase.

Treatment.—The tendency at present is to treat acute pancreatitis medically rather than surgically. Of particular help is the use of nasogastric siphonage. By keeping the stomach empty and aspirating the hydrochloric acid, the duodenal mucosa is not stimulated to secrete secretin, and this in turn diminishes pancreatic activity. If one can be certain of the diagnosis it seems far better to reserve surgical intervention for the complications if these develop. Numerous other methods of treatment have been advocated; these can be found in any standard text or monograph.

RENAL COLICS

The word "colics" is intentionally written in the plural form since other substances besides an opaque calculus may produce this syndrome. Microscopic thrombi, uratic debris and a ptosed kidney might also produce such pain. Anything which can produce dilatation of the ureter may be associated with renal or ureteral colics. The typical pain in the right loin with radiation downward along the course of the ureter and into the inner aspect of the thigh or genitalia is well known. A point which is particularly valuable is the occurrence of a bradycardia with such colic. It has been stated aptly that any patient with acute abdominal pain and a bradycardia is a renal or ureteral colic until proved otherwise. The associated pseudo ileus which may be present, particularly in patients who have a history of gout or parathyroid pathology, must be kept in mind. The demonstration of a stone on the flat roentgenogram or positive findings in the urine are good corroborative evidence. Emergency intravenous pyelography at times clinches the diagnosis.

CORONARY OCCLUSION

To discuss coronary disease under the heading of "Acute Abdominal Emergencies" might appear to be sacrilegious, however, to unnecessarily open an abdomen in the presence of an acute coronary attack is to court disaster. I am using the term coronary disease as an all-inclusive one. Any pain anywhere in the body which is precipitated by exertion or emotion (pleasant or unpleasant) and relieved by nitrites is coronary disease. That such pain may be referred to the abdomen, particularly the epigastrium, is well known. Positive electrographic findings, elevated leukocyte counts and friction rubs are helpful, but these are the exception and not the rule within the first few hours. Such patients, however, if carefully examined will fail to show rectus muscle defense particularly if such contraction is sought for at the end of inspiration.

SUMMARY

Seven conditions which account for more than 90 per cent of the pathology in acute abdominal emergencies have been enumerated. Time and space have permitted the inclusion of only a few highlights in the differential diagnosis of each. An attempt has been made to emphasize those points which are of practical and bedside value.

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Whiplash Injuries of the Neck

OTIS E. JAMES, JR., M.D., AND HERBERT A. HAMEL, M.D., *Kansas City*

SUDDEN INVOLUNTARY motions of the neck produce a pattern of injury which is becoming increasingly familiar and common. Davis[1] described this condition as a "whiplash" injury of the neck in 1945 and his term has remained popular ever since. Since the injury occurs so frequently from automobile accidents, its rate of increase is expected to continue at a fast pace in the future as it has in the past. The orthopedist sees these patients for diagnosis, treatment and, many times, for medicolegal examinations. The disposition of such cases can be an intriguing problem. The following discussion describes various aspects of the injury and includes an appraisal of cases studied by the authors.

The etiology of such injuries is almost the same in every instance. Occupants of a parked or decelerated vehicle suffer sudden hyperextension of the cervical spine when the vehicle is struck from the rear. Various degrees of recoil and other injuries may also be experienced but the main injury is still one of hyperextension. Early writers[2] on the subject emphasized excessive flexion of the neck as the cause of injury, but most recent observations[3] (Shaefer) have disproven this theory. Obviously any accident which produces hyperextension or hyperflexion of the neck could produce a whiplash neck injury. In this series of cases, 86 per cent were a result of rear-end autombile collisions.

In order to understand the pathology of such injuries, an understanding of the anatomy is necessary. Nodding, rotation and lateral bending of the head occurs primarily in the first two vertebrae and is due to their special design and structure. Because of this architecture it has been noted that slight rotation or tilting of the head to one side increases the stability and ease of position. This also might explain why most symptoms and findings are confined to one side. The five lower cervical vertebrae have motion characteristics comparable to the lumbar spine. Jackson[4] states that most stress and strain occurs at the level of the fourth and fifth articulations in hyperextension and at the fifth and sixth in flexion. This coincides roughly with the x-ray changes of interspace narrowing and local arthritis in our case study.

The joints involved in the articulation of each cervical vertebra include the two posterior joints, the lateral intervertebral joints and the secondary cartilaginous joint between the vertebral bodies. The lateral intervertebral joints play an important part anatomically in neck injuries because of their close proximity to the intervertebral foramina and the associated nerve roots (fig. 1). Subluxations or slight displacements change the articulation of the lateral intervertebral joint in such a way that the margin of the posterior joints cause a definite reduction in the size of the foramina (fig. 2). This reduction in the diameter of the foramina is an important cause of nerve root compression and irritation. It is noted that changes in the anteroposterior diameter of the foramina are greater in posterior subluxation than anterior subluxations. Also, studies of anatomic specimens show that the nerve root has ample room in the foramina vertically but fits rather snugly in the anteroposterior direction.

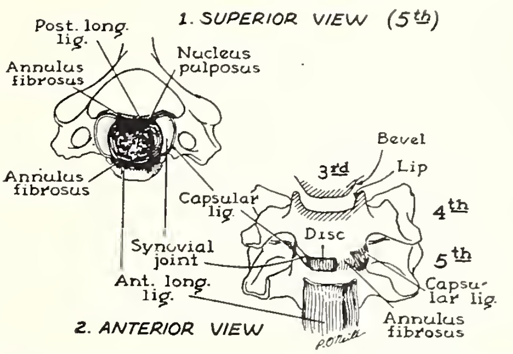
1. SUPERIOR VIEW (5th)
Post. long. lig.
Nucleus pulposus
Annulus fibrosus
Annulus fibrosus
Capsular lig.
Synovial joint
Ant. long. lig.
Bevel
Lip
3rd
4th
5th
Disc
Capsular lig.
Annulus fibrosus
2. ANTERIOR VIEW
P. O'Neill

Fig. 1. Sketch of anatomic specimen to show the lateral intervertebral joints and their relationship to the intervertebral fibrocartilaginous disk.

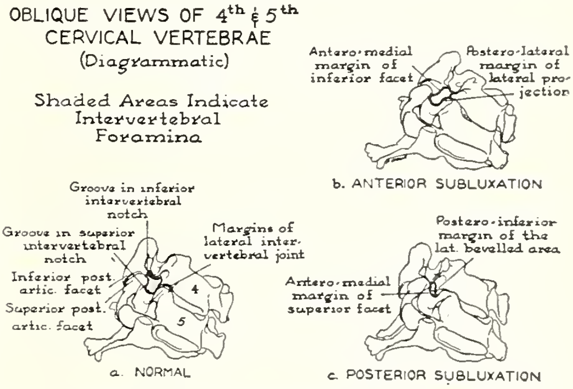
OBLIQUE VIEWS OF 4th & 5th CERVICAL VERTEBRAE
(Diagrammatic)
Shaded Areas Indicate Intervertebral Foramina
Antero-medial margin of inferior facet
Postero-lateral margin of lateral projection
b. ANTERIOR SUBLUXATION
Groove in inferior intervertebral notch
Groove in superior intervertebral notch
Margins of lateral intervertebral joint
Inferior post. artic. facet
Superior post. artic. facet
4
5
a. NORMAL
Postero-inferior margin of the lat. bevelled area
Antero-medial margin of superior facet
c. POSTERIOR SUBLUXATION

Fig. 2. Sketch of anatomic specimen to show intervertebral foramen and change in size and shape that occurs with flexion and hyperextension.

Soft tissue injury of variable degree is almost inevitable following such injuries. The capsular tissues and such ligaments as the supraspinous, the ligamenta flava, and the anterior and posterior ligaments are probably all involved. Undue stretching, tearing or relaxation produces local muscle spasm and pain. Subluxation of the cervical vertebrae is also possible from injury to the ligaments and, as stated previously, may alter the size of the intervertebral foramina. The presence of osteoarthritic spurs about the articular processes or lateral intervertebral joints also may reduce the size of the adjacent intervertebral foramina. When, in addition, subluxation occurs, there is a definite increased tendency for nerve root compression. Aggravation of this preexistent pathology from hyperextension injuries must occur frequently and undoubtedly delays the period of recovery. Narrowing of the interspace with pathology of the intervertebral disk may also be present as a preexistent condition. The aggravation of this condition certainly may complicate the plan of recovery. Some controversy exists as to how often disk pathology may be a source of nerve root compression. Anatomic studies and comments by Jackson[3] lead one to believe that true nerve root compression alone, due to disk protrusion, is rare. It is her belief that hypertrophy of the capsular ligaments of the lateral intervertebral joints and spur formation is more likely to cause nerve root irritation. Spurling and others[5, 6] indicate that disk protrusion is an important source of nerve root compression and obviously it does occur (fig. 3). Our case studies revealed no significant disk pathology, clinically. Myelography was not done and no case underwent surgical exploration for disk decompression. Congenital anomalies of the cervical spine occur occasionally and are subject to aggravation from hyperextension injuries. Such pathology may also prolong the disability and definitely should be considered.

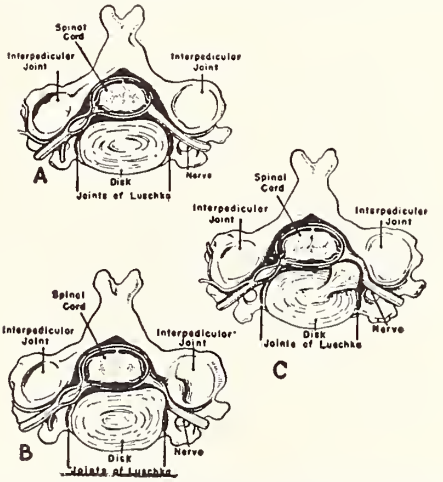

Fig. 3. A, the normal relationship between the intervertebral disk, the bony structures and the neural elements in the lower cervical region. B, the mechanism of compression of one of the cervical nerve roots by osteophytic spurs. C, lateral rupture of a cervical intervertebral disk with herniation of the nucleus pulposus.

The symptoms and findings in whiplash neck injuries are somewhat variable. The basic cause of pain is probably nerve root irritation. There may be minor complaints with negligible findings or severe pain and disability with marked nerve root compression. In this particular study there were sixty-three cases evaluated of which thirty-two were males and thirty-one were females. The age of the patients varied from 3 to 63 years. The average age was 33 years. The duration of symptoms varied from one day to two years and averaged three months. All patients complained of neck pain and variable degrees of stiffness. A common complaint in 46 per cent of the cases was headache which was usually described as extending from the base of the skull into the posterior orbital region. A similar percentage of the patients stated that the pain radiated into one of the shoulder areas and to a lesser extent into the corresponding extremity. Less frequent complaints included paresthesias of the upper extremity, chest and upper back pain and aggravation of pain by tension and weather changes.

Physical findings are not always too impressive or positive. The most common finding is limited motion. This study revealed 78 per cent of the cases to show some degree of limited motion of the neck to active and passive manipulation. Muscle spasm in the posterior group of cervical muscles is commonly associated with restricted motion and this was true in 66 per cent of the cases. Restriction of shoulder motion may occur in the more severe cases with a longer duration of symptoms. Ten per cent of our cases presented some degree of restricted shoulder motion. Maintenance of normal shoulder motion is usually present, particularly early after the injury. Actually, the presence of normal motion is of diagnostic significance and helps to differentiate certain neck problems from local shoulder pathology. The examination should always include tests for neurologic changes. Sensory impairment was noted in 30 per cent of the cases studied but only 4 per cent showed the more significant deep tendon reflex changes. Many patients experience exaggeration of pain and other symptoms if pressure is applied downward on the head in different positions, while upward traction may produce relief of symptoms. This is an excel-

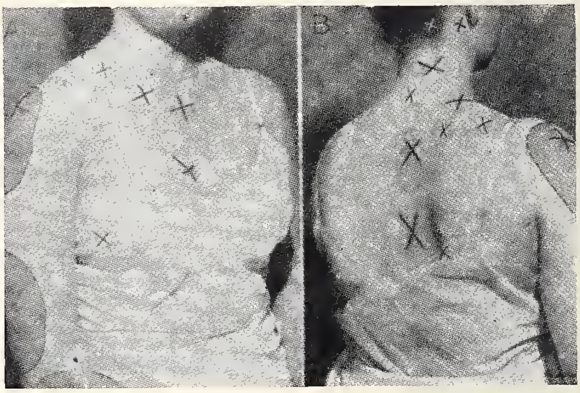

Fig. 4. X marks indicate areas of tenderness. Dotted areas indicate most frequent areas of sensory changes.

lent test and should always be included in the examination.

Figure 4 illustrates the common palpable areas of tenderness and muscle spasm.

X-ray studies form another essential part of the examination. Anteroposterior views of the cervical spine including special views of the odontoid process are taken along with three lateral views (figs. 5 and 6). The lateral projections include films in extension and flexion, which are quite helpful in detecting subluxations. Additional oblique views may be needed to bring out foraminal obstruction or encroachments (fig. 7). X-ray alterations from normal were present in 62 per cent of the cases studied. The great majority displayed straightening of the normal cervical lordotic curve (fig. 8). This is consistent with the expected findings of hyperextension injury and is attributed to muscle spasm. Davis[1] explains this straightening of the spine resulting from muscle spasm as an instinctive reaction of the patient to lean away from the source of pain. Thirty-four per cent of the cases in this series revealed localized arthritic changes with or without interspace narrowing. The interspace level of C-5, C-6 and C-7 were most commonly involved. One case presented questionable evidence of fracture involving the lamina of the fifth cervical vertebra.

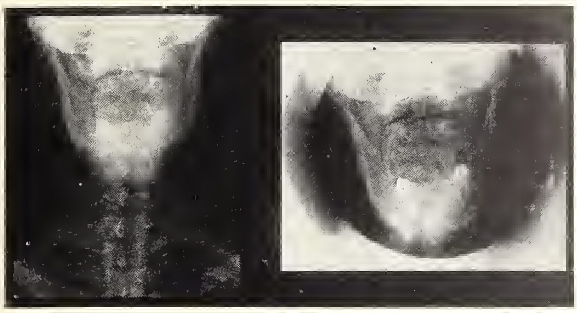

Fig. 5. Routine roentgenographic views of cervical spine in the anteroposterior position.

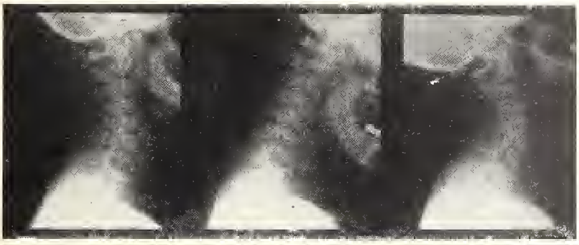

Fig. 6. Lateral roentgenographic projections in the neutral, flexed and extended positions.

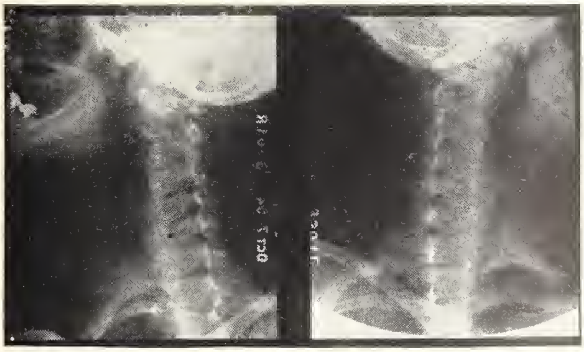

Fig. 7. Oblique roentgenograms of cervical spine reveal size and shape of foraminal openings.

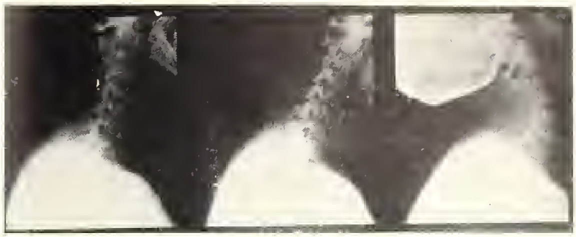

Fig. 8. Routine lateral roentgenograms showing straightening of the normal cervical lordotic curve in the neutral position.

The treatment of such an injury is sometimes discouraging because of the lack of cooperation of the patient and the variable response.

Those patients with mild symptoms may refuse treatment on the basis that it is too elaborate or time consuming. Usually, however, if a definite plan is outlined and the patient understands the rationale of treatment, recovery can be markedly hastened. Severe, early cases respond more satisfactorily to hospitalization where proper cervical traction, physical therapy, medication and careful observation can be supervised closely. Thirty per cent of the cases in the series were treated by this method. It is felt that this early plan of treatment reduces the period of morbidity remarkably. Outpatient management also can be arranged and organized effectively in many cases. Ambulation in a cervical collar (fig. 9), scheduled periods of traction in the home and supervised physical therapy will prove effective in many instances. Forty-eight per cent of our patients required the use of a

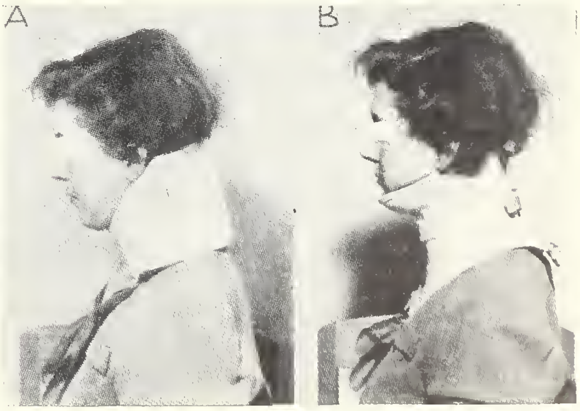

Fig. 9. A, felt collar covered with stockinet. B, celastic collar. Correct immobilization avoids hyperextension of the neck.

collar and traction to assist them in recovery from their whiplash neck injury. Proper sedation and supplementary medical management is an obvious adjunct in any such problem. Mephenesin is almost routinely given for muscle relaxation, but its value is questionable. Intractable cases with definite signs of nerve root compression may require myelograms for more accurate diagnosis and treatment. Surgery may even be necessary. As mentioned previously, we had no cases in this category. Neurosurgical consultation was obtained in about 5 per cent of the cases and continuation of conservative treatment was advised in all instances. Local infiltration of tender areas or "trigger points" with novocain is recognized as a useful aid in diagnosis and treatment. Its use in this case study however, was so infrequent as to be considered of no significant value. Contour pillows and good postural habits are quite helpful and are simple procedures to advocate.

It is noted from the description of the injury and the treatment outlined that the condition is self limited. An analysis of our cases at the present time confirms this supposition. No specific case in our study is known to have had severe permanent early disability. It is the feeling of the authors that considerable residual pathology in the cervical spine may develop in the long follow-up of certain cases. The residual pathology referred to is that of degeneration of the intervertebral disk with interspace narrowing and localized arthritis. The actual length of time necessary for such changes to occur is not known but probably takes several years. No follow-up observation of such pathology has been reported to the authors' knowledge. It is hoped that this phase of these injuries will be reviewed again when the present group of cases have a longer course of follow-up study.

SUMMARY AND CONCLUSIONS

1. Whiplash injuries of the neck result from hyperextension and are largely due to rear end automobile collisions.
2. The basic cause for symptoms and findings is soft tissue injury and nerve root irritation.
3. Preexistent pathology is frequently aggravated and may increase the period of morbidity.
4. X-ray examination is essential and abnormal changes are common.
5. Various aspects of treatment are reviewed.
6. The average length of time for symptoms and findings to subside is three months following which the amount of residual disability is considered negligible.
7. Long term follow-up studies should be done to determine if local arthritis and disk degeneration occur as suspected.

6306 Morningside Drive.

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Book Reviews

Textbook of Pediatrics, Edited by Waldo E. Nelson, M.D., Professor of Pediatrics, Temple University School of Medicine; Medical Director of Saint Christopher's Hospital for Children. With the collaboration of Seventy Contributors. Sixth Edition. W. B. Saunders Company, Philadelphia. 1954. Price $15.00.

This is the most complete of the one volume textbooks of pediatrics. The editor has selected seventy well known pediatricians as collaborators, some of whom are new in this edition. Most sections have been revised and modernized and many have been rewritten. Some new material has been added, articles on kwashiarkor and cytomegalic inclusion disease for example. The editor is to be commended for keeping articles short, complete and readable by avoiding unnecessary minutiae. For students and practitioners of pediatrics this volume will be worth while. T. Z.

Manual of Antibiotics, 1954-1955. Preparations, Therapeutic Index, Generic and Trade Names, Producers. Prepared under the Editorial Direction of Henry Welch, Ph.D. Published by Medical Encyclopedia, Inc., New York. Distributed by American Pharmaceutical Association, Washington, D. C. 1954. Price $2.50.

This volume consists solely of a list of antibiotic pharmaceutical preparations. The primary divisions of the classification is based on the active antibiotic principle, and the subdivisions consist of the trade names. For example, "Potassium Penicillin Tablets" is the heading of one primary division. This is subdivided into "Buffered tablets," "Soluble, Effervescent tablets" and "Soluble tablets." Each of these three subdivisions is further classified according to the number of cents per tablet. The final subdivision is a list of trade names and manufacturers names. For example, "Orapen-50, Schenley Laboratories, Inc.," finds itself grouped under Potassium Penicillin tablets, Buffered, 50,000 units per tablet.

By reason of the large number of trade names for the various antibiotics this volume is ideal for finding out what the constituents of a given trade name is. Obviously, it would be highly valuable to the pharmacist. Its value to the practicing physician would be less obvious. However, it is an excellent sources of this type of information. C. J. S.

Postgraduate Review

The Care of the Cardiac Patient

Retrospect and Prospect

WILLIAM S. MIDDLETON, *Madison, Wisconsin*

YOUR PRESENCE bespeaks an interest in one of the most important medical problems confronting us today. I say "us" advisedly, for diseases of the heart and blood vessels must perforce impress themselves directly or indirectly upon each and every one from time to time. The magnitude of the problem may be gathered from the death rate of 762,000 from these causes in the United States in 1951. This figure represents 51 per cent of the total deaths; so that more people died from cardiovascular diseases than from all other causes combined in 1951. This situation obtains down to the present time. Rheumatic fever is the greatest killer of children between 5 and 19 years old, ten times as deadly as infantile paralysis and five times more deadly than poliomyelitis, whooping cough, scarlet fever, measles and cerebrospinal meningitis combined. Nor is the mortality table the sole index of the gravity of the situation. It is estimated that there are ten million sufferers from heart disease in the United States. Of this number, 500,000 are in elementary or secondary schools. The projected handicap of this group should not be minimized. The attrition in manpower and its reflection in economic loss and sociologic dislocation must receive ever-increasing attention. The impact of the aging population upon this problem is reflected in the changes incident to arteriosclerosis and hypertension, among other disintegrating forces.

Let us resolve this matter to a more personal basis. An intelligent American laity has developed a deep interest in medical matters. The average individual reads with rapt attention articles dealing with the pituitary-adrenal axis, ACTH and cortisone in the *Reader's Digest*, *Time*, *Newsweek*, *The Ladies' Home Journal* and other lay media. Actually, while he is duly impressed, there is no profound nor lasting influence on his thinking. Let the article, or for that matter conversation, turn to disorders of the heart and circulation and immediately a train of association will extend the implications to logical or illogical extremities. To him, the heart is a vital organ and any indication of its handicap is multiplied a thousandfold. The slightest hint of "heart trouble" will initiate a flood of compensatory devices that may render him a psychologic invalid for life. Indeed, any symptom arising thereafter, however remotely related, may serve as a mental mordant to fix the imprint.

The psychology of the sick has consciously and subconsciously engaged the attention of the studious physician from the beginning of recorded time. With illness comes a singular revelation of underlying psychologic patterns. Submerged personal traits become more suppressed or more evident. The manifest extrovert, the life of the party, becomes remarkably self-centered and devoid of centrifugal interest. The sick person is essentially a selfish, egocentric individual whose bodily or mental ailments have suddenly or progressively made him more conscious of his functions and his limitations. The understanding physician accommodates himself and the environment to this reaction of the patient. His attention will unostentatiously cover such details in the interest of the psychologic as well as the physical readjustment of the patient.

In no capacity of the patient-physician relationship has the true art of medicine more effective play. This circumstance will impress itself in the technic of the history taking, where the utmost care is enjoined to avoid the initiation of undue concern on the part of the patient. Leading questions relating to the circulation are especially eschewed. Sympathetic objectivity may resolve many of these potential sources of danger. Conversely, the physician will be ever alert to warning signs of organic cardiovascular lesions that may be distantly referred or placed. For example, the classical amber light of indigestion on effort after eating may without further warning change to the red of coronary occlusion with myocardial infarction. Nor will the careful clinician overlook the equivalents of precordial oppression, dyspnea and "sinking" attacks, after occlusion has occurred.

The physical examination of the patient with cardiovascular complaints must be especially exhaustive and painstaking. Only by meticulous care may one localize the source of the complaint in a comprehensive diagnosis. Not infrequently circulatory symptoms find an entirely different organic or systemic explanation. After crying in the wilderness for twenty-three years, Herrick (in 1935) was constrained to admit that errors of commission in the diagnosis of coronary occlusion with myocardial infarction were far exceeding those of omission, as had been the case in the

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From the Department of Medicine, University of Wisconsin Medical School, being in substance the Frederick Conrad Narr Memorial Lecture of the Kansas City Heart Association, delivered April 21, 1954.

earlier period; whereupon, he listed twenty-eight sources of error. Furthermore, the reflections of the local anemia and the chronic passive congestion in distant parts on the basis of heart failure may be most misleading. Finally, the ultimate evaluation of the circulatory reserve presupposes a careful assessment of the physical findings of the complete examination.

The technic of such an examination will observe the same protective psychologic devices that obtain in the elicitation of the history. Psychic trauma must be avoided at any cost. To emphasize only the points of especial significance, the color and the texture of the skin will first be observed. Petechiae must be sought in the skin and mucous membranes. Plethora, pallor and cyanosis should be noted with particular attention to their occasion and distribution. The respirations will be studied carefully. The rate, rhythm and type of respiration may convey important information. The eye grounds must be studied for vascular changes, hemorrhage, exudates and papilloedema. The peripheral vessels will receive due attention as to their structure and pulsations. The compressibility of the pulse affords only a rough guide to the arterial blood pressure. A gross judgment of the texture of the arterial wall may be gained by rolling the collapsed peripheral vessel under the palpating fingers. Always the radial pulses should be palpated simultaneously to establish their synchrony and equality. Minor differences in the time and the force of the two radial pulses may be the first clue to serious pathologic changes in the aortic arch, the innominate or the subclavian arteries. Deficits between the apical and the radial pulse rates are encountered in auricular fibrillation and extrasystolic arrhythmia. Abnormal pulsations, thrills and murmurs in the vessels of the neck are important links in the chain of cardiovascular evidence. A disparity between the jugular venous pulse and the apical or radial arterial pulse rates may first suggest auriculo-ventricular heart block. Venous hums over the jugular bulb in anemic patients are frequently overlooked or misinterpreted. At this point the dorsalis pedis and posterior tibial pulses should always be ascertained. On their inadequacy or absence may rest the diagnosis of coarctation of the aorta, or the determination of arterial insufficiency of the feet. Pressure over the tibial crest for a minute or more is required to establish or rule out the presence of edema. In the patient confined to bed the sacral region may be the site of greatest dependency and observations for edema should be so directed.

The examination of the thorax should be initiated by a study of its configuration and movement. Since this phase of the examination is truly a focal point of concern to the patient, utmost caution must be exercised in its performance. The approach must be direct, but not brusque; nor can it be a casual or an apologetic contact. Preoccupation may dissipate rapport; affectation, such as the intent, closed eyes of certain self-conscious examiners, frequently destroys confidence. Nor is the "bird-dog" attitude, ranging to and fro over the precordium to come always "to point" at the cardiac apex or other point of interest, conducive to the psychologic ease of the patient. Meticulous inspection in a tangential light, palpation, percussion and auscultation with appropriate attention to the influence of position, respiration and effort upon the resulting signs must be enjoined. Stop, look (feel), and listen! Without exhausting the range of physical signs, particular attention must be paid to localized abnormal pulsations, thrills, murmurs and friction rubs. The tambour quality of the aortic second sound ("bottom of the well") may afford the earliest evidence of a loss of the elasticity of the aorta. By many clinicians the sharpness of the mitral first sound is deemed the most characteristic sign of mitral stenosis. Increasing notice is being paid to the rough systolic murmur of aortic stenosis in the second right interspace, since clinicopathologic correlation has weakened an earlier dogmatic insistence upon the pulsus parvus et tardus (and low pulse pressure) for its diagnosis. The rhythm of the cardiac action will be carefully noted. Pulmonary congestion and hydrothorax will give characteristic signs. Abdominal distention may arise from tympanites or ascites in cardiac decompensation. Hepatic and splenic congestion may lead to enlargement and tenderness of these respective organs. Reflex spasm of the right upper rectus may be elicited by ulnar percussion over the right lower axilla in the presence of hepatic congestion (or inflammation).

The simplest studies of the hemodynamics relate to the observations of the pressures in the peripheral vessels. In general, other factors excluded, the venous pressure in the veins of the arms reflects the capacity of the right heart to accept the blood returning from the systemic circulation. Direct and indirect methods for its determination are available. A rough approximation of the venous pressure may be obtained by raising the hand gradually above the level of the auricles. The level at which the veins on the dorsum of the hand collapse upon elevation above this point is read as the venous pressure (Gaertner). The positive centrifugal venous pulse reflects tricuspid insufficiency, while the positive centripetal venous pulse occurs occasionally in aortic insufficiency, arterial hypertension and hyperthyroidism.

Perhaps the lay public attaches greater significance to sphygmomanometry than to any other single technical observation of the physician. "Blood pressure" has captured the imagination of the uninitiated and medicine finds itself confronted with a psychologic Frankenstein of its own making. Convinced that this objective manifestation is a useful index of cardiovascular stress and strain, the clinician uses its determination as a means and not an end. As a rule its significance should be played down to the patient, lest he attach a dominant role to an objective finding. My father in medicine, Doctor David Riesman, never told his patients their blood pressure. If one inquired the result of a determination, particularly if it were a woman, Doctor Riesman would counter, "How are your bowels?" With a twinkle, he commented, "You would be surprised how diverted they are."

Fifty years have passed since Einhoven (1902) developed the electrocardiographic apparatus which has revolutionized the clinical understanding and interpretation of cardiac conduction and arrhythmia. The staff of the University of Wisconsin Medical School, both in research and in clinical fields, took a prominent part in the exploitation of this new tool. The work of Eyster, Erlanger, Meek and Gasser greatly advanced knowledge in this area. After an Edelmann electrocardiographic apparatus has been purchased from abroad by the University, the incomparable departmental mechanician, the late James Hipple, constructed a duplicate for simultaneous studies. Professor Einhoven visited the University of Wisconsin in 1914. After he had been conducted through all of its more presentable laboratories, with some trepidation, my associates of the Department of Physiology took him to their meager quarters in the basement of Science Hall. The distinguished guest warmed perceptibly, took off his coat and dickey and exclaimed, "Now this is home!"

The utilization of electrocardiography has been vastly extended in the last forty years both in the laboratory and in the clinic. Careful physiologic and clinicopathologic correlations have given a high measure of accuracy to this laboratory aid. In addition to improved interpretation, technical advances have assured more constant and stable results. The modern cardiologist and technician can never know the idiosyncrasies of the string galvanometer. When the commercial sources of the silvered strings were closed by the exigencies of World War I, replacements from University shops were frequently crude and unsatisfactory. Electronic measures have replaced this insecure device. The simple limb leads have been widely extended to the body. Unipolar leads are now universally employed. Not satisfied with body leads, esophageal and intracardiac leads have been explored. Vectorcardiography, electrokymography, ballistocardiography are passing through experimental phases. The circulation time is observed under several technics in many patients. Minute volume output is a more specialized procedure.

Roentgenography has an established place in the study of the heart and great vessels. Fluoroscopy is an invaluable aid in defining the movement of the heart and the aorta. The teleroentgenogram or the orthodiagram is utilized for greater accuracy in establishing the heart size and contour. Kymography has undergone a relative eclipse, but its usefulness in determining areas of myocardial infarction and pericardial synechia cannot be overlooked. The resurgence of cardiac surgery for the repair of congenital defects and stenotic valvular lesions has led to renewed interest in angiocardiography. The advances in this area are truly astounding. Hand in hand with this development and serving as an invaluable component in the total assessment of surgical availability in such patients is cardiac catheterization. Pressure determinations and gas analyses of the blood in the chambers of the heart and in the great vessels are made by this means. While not infallible, a measure of accuracy has given assurance in an area that was peculiarly insecure in the past. By special technics coronary, hepatic and renal blood flow can be measured. The arteriovenous oxygen differentials in these studies have assumed increasing importance.

The therapy of cardiac disorders has advanced immeasurably in the recent past. The discovery of salvarsan spelled the beginning of the doom of syphilis. Today, with penicillin added, syphilitic aortitis and aneurysm of the aorta constitute a minor numerical threat. Always there remains the physician's obligation in the prophylaxis and the early adequate treatment of syphilis to insure the millennium of its eradication. With the advent of sulfonamides, a ray of hope could be entertained in the treatment of subacute bacterial endocarditis. Instead of a mortality of almost 100 per cent, 16 per cent of patients with this condition receiving sulfonamides early in its course survived. Penicillin and other appropriate antimicrobial agents afford a survival rate of 80 per cent or better to such sufferers at the present time. Again, let it be emphasized that an added responsibility is placed upon the physician in the early recognition and adequate treatment of subacute bacterial endocarditis, since mere sterilization of the blood stream does not insure recovery. Too many patients surviving the bacteremic phase of the disease die from cardiac failure through the resultant damage to the myocardium as well as the endocardium.

Advances have been made in many other directions in the treatment of the cardiac patients during the last forty years. Physiologic studies have demonstrated the advantage of the semi-Fowler position over the supine for patients in heart failure. The day of complete prolonged bedfastness for the patient with cardiac decompensation is past. The physical effort entailed in using the bed-pan far exceeds that required in turning to a bedside commode or moving to an adjacent toilet. The application of sound physiologic principles has dictated increasing physical demands upon the circulation as soon as a plateau of improvement has been reached. However, into this modified position, no support of the irrational demands upon the myocardium in its hour of anguish immediately after infarction should be read. By the same token, interminable extensions of rest by reason of continued but minor evidence of circulatory incompetence cannot be condoned. Just as prolonged inactivity leads to flabbiness of the skeletal muscle, so the myocardium can only regain a measure of its tone by appropriately increased demand. In such patients a gradual resumption of physical activity may be attended by unanticipated amelioration of the signs of cardiac failure. Furthermore, there is a heavy charge of medical ineptitude in the addition of the psychologic hurdle of invalidism that attends protracted bedfastness.

From the beginning of time, the diet of the cardiac patient has been a shining target for clinicians. Unbelievable fadism has obtained in certain instances. Hutchinson characterized the vegetarian diet as a harmless diversion that "tended to fill a man with wind and self-righteousness." Sharp limitation of the fluid intake has given way to liberalization. Brine-logging rather than water-logging (Schemm) places the responsibility for anasarca properly upon sodium retention. Hence, fluids may be permitted to the patient's taste, provided the sodium intake is limited. Significant reduction in the use of xanthine and mercurial diuretics for the control of edema in cardiac decompensation has attended the wider acceptance of this principle. In fact, certain cardiologists maintain that there is an inverse ratio between the amount of mercurial diuretics and the adequacy of the medical management of cardiac decompensation. Reduced sodium intake imposes certain responsibilities upon the clinician. The low sodium syndrome may be precipitated by the injudicious use of mercurial diuretics and digitalis concurrently with diminished sodium intake.

The field of cardiac therapy finds an amazing conflict of opinion relative to the virtue of the various preparations of digitalis. Literally, there is a contest of the glycosides versus the galenicals. Despite the advantages of assured absorption and elimination of the glycosides, a fundamental fact must always be kept in mind. Digitalis is digitalis. Regardless of the preparation, the action is the same, and the chance of toxicity is ever present. In fact, there is no digitalis derivative without a possibility of this unfortunate side effect. Circumstances of known absorption and fixed elimination or destruction may lead to a preference for one or other of the glycosides in certain patients. As a rule, I prefer the galenical preparation by reason of the flexibility of its dosage when administered as a tincture. Contrary to the widely held opinion, a good tincture is relatively stable in potency. Its dosage must be in minims not drops. After a maintenance level has been established, digitalis folia in tablet form may be substituted in appropriate dosage for the tincture. With a revival of interest in the cardiac glycosides comes a renewal of the suggestion of rapid digitalization. Indeed, exceeding the earlier Eggleston method, Gold has recommended the single dose method of digitalization. Unfortunately, his caution of avoiding this approach in patients who have received digitalis within two weeks has been overlooked in certain quarters to the extreme detriment of the patient. Furthermore, the emergency rarely occurs when more conservative digitalization does not suffice. In such instances, again where digitalis has not been given within two weeks, crystalline strophanthin (ouabain) in doses of 0.00025 to 0.0005 grams (¼ to ½ mg.) intravenously may prove useful. Radioactive iodine (I^{131}) may find a valuable place in the treatment of cardiac decompensation and coronary insufficiency (anginal syndrome).

The response of cardiac decompensation to conservative therapy based upon sound physiologic principles is usually most heartening; yet the entire area of cardiac complaints is fraught with unusual responsibility. The apprehension of patients with symptoms of organic cardiac origin must be accepted as natural. Thus prepared, the physician must ever be on his guard to protect the patient against psychic trauma. If there be no organic disease, his responsibility in reassurance is high grade psychotherapy; but the physician will appreciate that his patient with an organic lesion of the heart may well have a psychic overlay. Indeed, this functional factor may be even more disabling than the pathologic lesion. Yet, by no word or act should he contribute to the patient's burden. Silence may, under certain circumstances, be more damaging than overt speech. Probably in no other relation has the charge of iatrogenesis of disabling complaints been more squarely traced to our door.

The surgery of the heart and great vessels has recently received tremendous impetus from the advances in physiology and anesthesiology; but its substantial growth stems from an appreciation of precise anatomic and physiologic deviations established upon cardioangiography and cardiac catheterization. The interruption of the patent ductus arteriosus was the first surgical goal. Craaford then reconstructed the aorta for the correction of coarctation. With these milestones passed. Blalock and Taussig developed their superb technic for a partial relief of the handicap of the complex tetralogy of Fallot. With the success in the field of congenital diseases of the heart and great vessels, surgeons reexplored the feasibility of relieving the mechanical handicap of high-grade mitral stenosis. The early results are most encouraging and are being extended to other valvular lesions. In severe mitral stenosis an extracardiac Lutembacher effect has been attempted in the anastomosis of the right inferior pulmonary vein with the vena azygos major. In the presence of marked right ventricular hypertrophy in mitral stenosis paroxysmal dyspnea may result from tachycardia. The removal of the lower cervical and upper five thoracic sympathetic ganglia provides a physiologic block to acceleration of the heart. A progressive group of cardiac surgeons is looking for new worlds to conquer. Other valvular lesions and septal defects are receiving renewed attention. The artificial heart which theoretically promised to extend the range of cardiac surgery so securely, has had little part in this development. The future may hold a much more significant role for this device.

Curative medicine and reparative surgery still hold the center of the stage. Lip service is given to preventive medicine but in their heart of hearts physicians crave more and sicker patients. The challenge of a difficult diagnosis and the successful conduct of a grave illness—with nature's assistance—still hold the supreme place in the true physician's psychologic reactions. The future of medicine lies in the conscious intelligent effort to prevent disease. Of infectious diseases with the serious impact in cardiac invalidism, syphilis is, as indicated, the most amenable to control. With adequate prophylaxis of venereal disease in general and syphilis in particular, it should no longer be a hazard. If prophylaxis has not been effected, the early recognition and the early adequate treatment of syphilis with penicillin will eliminate later disabling cardiovascular complications. Rheumatic fever has baffled the medical profession for generations. Its dependence upon the sensitization to the beta hemolytic streptococcus presents not only a clue to its pathogenesis but a vulnerable point in its prophylaxis. The latest studies of the Armed Forces indicate a high efficiency for penicillin used in streptococcal infection of the nose and throat for the prevention of rheumatic fever. Since sensitization to the hemolytic streptococcus persists, penicillin should be given orally throughout periods of increased incidence of streptococcal infections or upon the slightest evidence of the development of such in the susceptible host. Furthermore, in the patient with rheumatic heart disease to avoid subacute bacterial endocarditis, no surgical procedure however slight should be undertaken without the protection of penicillin. Singularly, penicillin is apparently without benefit in the acute phase of rheumatic fever. In rheumatic carditis, adrenocorticotropin and cortisone may be life-saving. There is no apparent evidence of their protection against valvulitis.

The metabolic disorders take their major toll in cardiovascular degenerative changes and disasters. We must be ever alert to our responsibilities to the obese, the diabetic and the gouty patients. With due attention to the basic metabolic faults of these patients, atherosclerosis may be delayed or averted. The contribution of obesity to degenerative changes is generally accepted and it clearly falls within the zone of preventable disorders. A tolerant public smiles on the fat boy, but begins to look askance at the beefy adolescent. Obesity in the adult is unpardonable. Certainly from a medical standpoint, it imposes a serious threat to the health and the circulatory efficiency of its bearers—much less mileage for the fuel. Our medical interest relates to the ease of its control. Reducing drugs have no fundamental place in the general problem and only a limited place in the specific instance. They should be taken only upon a physician's advice. Weight reduction by dieting is the natural approach, but its regulation should be in skilled hands, free from fetish. A word of caution—schedule weight reduction at a rate not to exceed eight to ten pounds a month until the normal level for the age, height, and sex is reached. Serious physical and psychic reactions may attend more rapid weight loss. Be reasonable.

In the instance of diabetes mellitus Root and his fellows have established a direct relationship between the adequacy of diabetic control and the development of atherosclerosis. When control is good and maintained, the diabetic patient may anticipate a normal expectancy in his cardiovascular system. Conversely, poor and irregular control leads to precocious and serious vascular complications.

Arterial hypertension, although essentially an objective sign, reflects much more fundamental pathologic physiologic changes. The ultimate impact of the increased load upon the heart and blood vessels requires no elucidation. Yet, not all elevation of blood pressure carries with it the connotation of imminent danger. For example, Doctor Riesman, in speaking of "High Blood Pressure and Longevity," cited a high systolic pressure of more than 200 Mm Hg. for twenty-five years in a woman 97 years old. Incidentally her diastolic pressure never exceeded 100 Mm Hg. Aside from such recognized etiologic factors as chronic nephritis, cerebral tumor, pheochromocytoma, hyperthyroidism and obesity, there remains a large group of hypertensive subjects with cause unknown, so-called essential hypertension. Unquestionably, psychologic factors play an important role in these patients. They are taut, tense individuals, who hit on all eight cylinders and never learn that they have an intermediate or low gear. Riesman insisted upon the relation of this condition to the pace of American life and living. Certainly, there is little time for peaceful contemplation in our present day frenzied existence. Perhaps Duhamel was right when he said, "What America needs is more loafers or, rather, dreamers, if she wants to be saved from herself." Before

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a fixed pattern of vasomotor reaction has been established, and while the vascular trees of the brain, heart and kidney are intact and capable of relaxation, psychotherapy may be of inestimable value. Rapport between the hypertensive patient and the physician pays large dividends in all plans of treatment. A favorite prescription is one-half to one hour rest after the noon-day lunch, and eight to ten hours rest at night. The immediate resistance of the patient to this proposal as expressed in doubt soon gives way to relaxation and actual sleep, even for the short mid-day period. Small doses of barbiturates (phenobarbital 0.015 to 0.03 grams three times a day) may prove particularly useful in the early phase. Advice as to recreation and holidays should be carefully checked to establish the exact nature and manner of such purported relaxations. They may prove much more strenuous than normal pursuits. The responses to the several suggested surgical procedures, including sympathectomy and adrenalectomy, are gratifying at times; but their limitations are well defined and their application restricted. Adrenalectomy has a small area of usefulness in patients with advancing hypertension, uncontrolled by simple measures. Perhaps the most hopeful advance has been in the action of a series of antihypertensive drugs. However, the therapeutic target is an end-result and not the cause of the basic condition. Significant as have been the advances, no panacea has been found and the results will be limited until the true pathogenesis of arterial hypertension is disclosed. Of course due attention will be paid to any possible contributing factor.

The progress of the knowledge of cardiac disorders and their management over the last forty years has been most stimulating. The transition from the etiologic to the physiologic approach has not only extended the basic understanding of these conditions, but has given impetus to sound therapeutic advances in which medicine and surgery have participated. The future of the cardiac patient is more hopeful than ever before. Psychologic, as well as physical, rehabilitation plays an important role in the total gain. The physician should be the last to sow the seed of doubt or the weight of uncertainty in the mind of the sufferer. Iatrogenesis of a cardiac complaint must never be laid at our doors.

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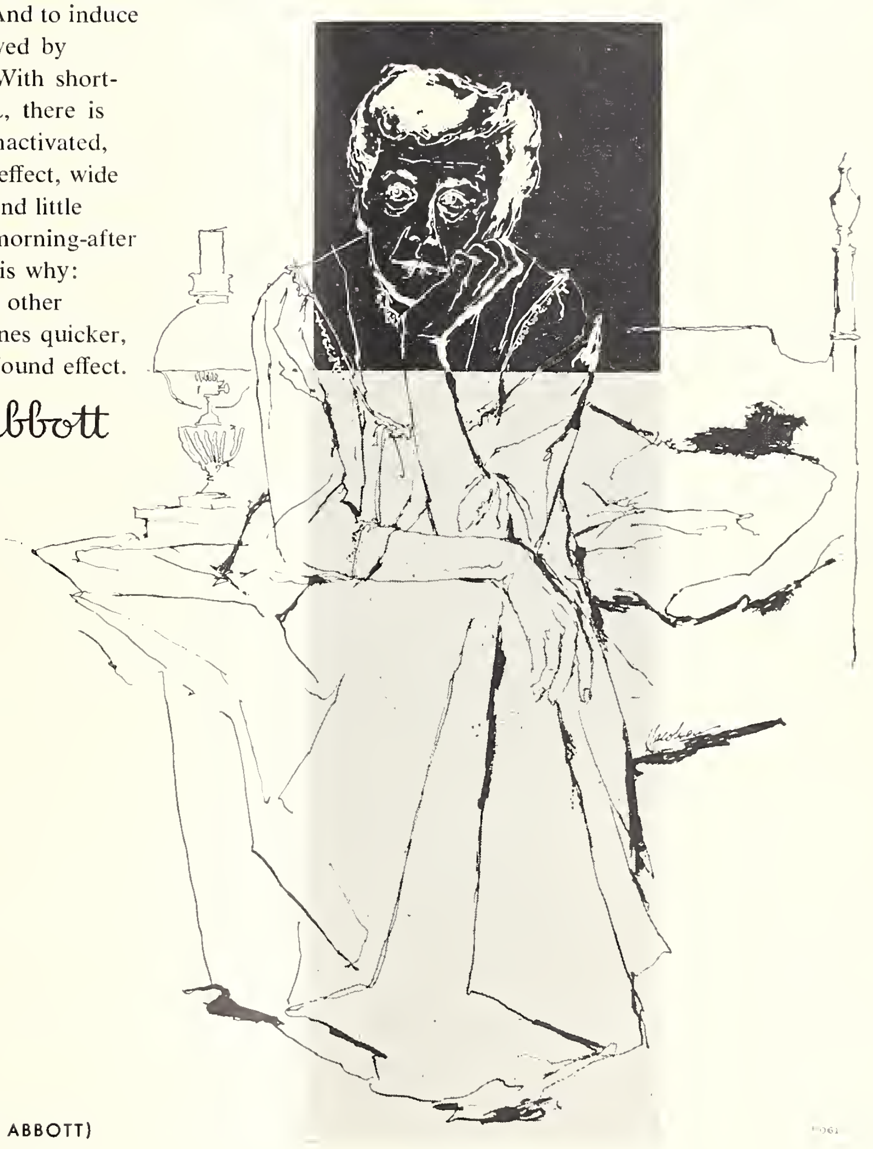

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Special Article

Religion and the Art of Healing

REV. E. F. ABELE, *Boonville, Mo.*

As far as we can determine or surmise, disease has existed since there was life on earth. It may be that the earliest form of disease was metabolic, manifesting merely the wear and tear of the living organism. Soon, perhaps, in addition to these changes associated with senescence, abnormal changes developed in certain subdivisions of living matter, changes which altered definitely the character of these subdivisions, and which were not the simple changes resultant of ageing. It is characteristic of what we understand of life that the constituents which make it up are in a state of constant activity, the component elements breaking down and being replaced by additional elements derived from without. The process of building extraneous inanimate material into living tissue has come to be known as anabolism, while the disintegration of living structure has been called katabolism. The whole process, constantly going on, is termed metabolism. This process can go on only as long as there is available material for growth and repair at hand. At first all materials for anabolic processes were without doubt derived from inanimate, inorganic matter. Finally, living tissue developed the capability of obtaining sustenance from other living organisms. This condition, one body living at the expense of another living body, has been termed parasitism. Thus, by degree, parasitic disease developed, known today as infectious disease.

So, long before man appeared upon the earth, living matter suffered in one form or another from most of the disease-types known today. As soon as man developed sufficient intelligence to distinguish metabolic disease from parasitic infection; when he learned how to interpret and describe pain and other symptoms characteristic of disease, and when he began to wish to relieve himself or his neighbor of this abnormal state, the practice of medicine and healing in its crudest forms began.

Among the earliest savages, disease was regarded as being supernatural in origin—the work of an unfriendly demon or the form of punishment inflicted by an angry god. Attempts to rid the body of this affliction consisted therefore of making sacrifices to propitiate the offended deity or of doing penance for one's sins, or by seeking the intervention of more friendly spiritual forces. This was accomplished by starving, beating or otherwise torturing the victim in order to make the body as unpleasant an abode as possible. Or, again, the evil spirit was enticed by the offering of a more pleasant abode. Thus the demon of yellow jaundice might be lured into the body of a yellow canary.

This belief in the supernatural origin of disease persisted far into historical times and it is still manifested in Greek and Roman mythology and theology. It was evidenced in the early Christian era and much of the New Testament record of Christ's healing revolves about the idea of demons and disease was to be considered as an act of divine retribution.

It is interesting to trace this factor in its relation to early medical healing. True medicine had its origin in the early Greek civilization. The Greeks of the third and fourth century B.C. worshipped many gods and demigods. To the temples of these various gods went the distressed, to regain health by prayer, sacrifice or other methods of imploring divine intervention. The priests at these temples had ample opportunity to observe many forms of disease and soon recognized the types of illness with the greatest promise of relief through their treatment—which might be the giving of emetics to cause vomiting or the starving of the body—a form of dietary treatment. The importance of diet, baths in mineral pools and various forms of mental and physical recreation and activity were fully recognized and utilized. The healing art was in the hands of the religionists.

About this time the fortunes of the world were materially advanced by the birth of Hippocrates. He upset the old tradition and divorced, in part at least, the practice of medicine from theological superstition and paved the way toward the rational study of the human body. Shortly after his death, the beacon of learning in Greece burned low and the center of civilization was shifted to Alexandria, Egypt, where Ptolemy, one of Alexander's generals, had founded a great museum and center of investigation. Here further progress was made toward a clearer understanding of anatomy and physiology. About this time the Roman Empire became important and a new light in the history of medicine appeared in the person of Galen, the greatest of Roman physicians and the greatest since Hippocrates. But civilizations, like human beings, grow old, become decrepit and die. But also like human beings, their influence is sometimes felt long after they have died. Greek medicine deteriorated—the Roman Empire declined and the Christian religion was in ascendancy, and under the in-

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Address delivered to the Postgraduate Meeting of the Missouri Heart Association at Camdenton, Missouri, Nov. 18, 1954, by the Reverend E. F. Abele, Boonville, Minister of the Evangelical and Reformed Church.

fluence of its theology, attention was turned from the physical aspects of life to the spiritual. Revelation replaced reason, and rational medicine for a time was replaced by superstition as is evidenced in much of the New Testament writings. The teachings of such Greek physicians as Hippocrates and Soranus were lost to the practices of the western world. Yet, fortunately some were preserved in the manuscripts collected in the monasteries of Christian Europe. They were buried there, to be rediscovered and resurrected centuries later. While they waited, the struggle for medical knowledge was crushed by the power of the Church and the clergy zealously retained the gathered learning within the monasteries as a scepter to sway the masses, who were kept in ignorance.

But the most important path through which early knowledge was kept alive was through the efforts of the Arabian infidels. As the Arab hordes swept across northern Africa, conquering all in their path and finally subjugating parts of southern Europe, their appetite for knowledge grew and they gathered the great scholars of the time and formed famous centers of learning. Before the 9th century had ended they were in possession of all the sciences of the Greeks and had produced students of the first order from their own ranks, showing an aptitude for the exact sciences which was lacking in their instructors whom they finally surpassed in knowledge and skill.

During the Renaissance, with the return of the desire for learning in Christian countries, medicine and other sciences were reclaimed from the Arabs chiefly through the Crusades. In the 13th century, great universities arose throughout Europe, many of them associated closely with the monasteries.

Conscious of all this development, we turn our attention now to the 20th century. There have been few periods in history more laden with doubt and disillusionment than our century. We have reached the pinnacle of scientific and mechanical achievement. We have reshaped the physical world with such intensity that we have forgotten to consider the mental and the spiritual values essential to balanced living. If we could solve our mental and emotional problems on a physical basis, the way ahead would be clear and easy. But if we make man's surroundings merely more comfortable but give him no spiritual vision, if we make his physically richer but psychically poorer, leaving him no understanding of the meaning of life and with an ever-increasing doubt of God—there is no solution to the tragedy of his experience.

Man is more than a machine and any profound study of his life and thought brings us to the place where science and religion meet. Jesus, the Master Teacher, had full awareness of this truth when He said: "What shall it profit a man if he gain the whole world and lose his soul?" From

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the beginning of time, two great problems have dominated man's thought—the problem of his relation to God and the enigma of himself. The former became the background of religion and the latter grew into the science of medicine.

It is quite easy to trace how at times religion and medicine complemented each other for a span of years, only to be separated again and to be at enemity with each other. In modern times the evidence is at hand that all the art healing was nurtured and fostered by religion. Religion became the hand-maiden of medical healing—hospitals were founded, and various religious orders, both in Protestant and Catholic circles assumed the burden of ministering to all of men's physical and mental needs. During this time medical science made great strides and gradually dominated again in importance—giving birth to a philosophy that if man's physical ills are alleviated, nothing else matters. At the height of this tendency the contribution that religion can make was discredited and for a time it seemed that the ever-repeated situation of the past would separate the two again into hostile camps. It was during this time that the medical profession barely tolerated the service the clergy can render to the patient. The reason for this was quite evident and the blame must be mutually shared, for each mistrusted the other. It was the great conflict of our time—science versus religion. It is acknowledged now that each misunderstood the other and fortunately for all the saner spirits on both sides gained control of the situation and agreed that in the truest sense science and religion are not enemies but servants one of the other.

With this mutual understanding attained and with proper regard for each other a cordial working agreement was reached. For nearly thirty-three years of ministry to the spiritual needs of people I have come to understand, and with respect, the relationship between physician and patient. It has ever been evident to me that the representatives of your profession who have gained the greatest confidence of their patients are those who have recognized that not all of the ills of men are physical. His proven medical skill is only a partial source of the confidence he inspires. His sympathetic concern for the patient's general well-being makes the confidence complete. Such recognition regards the patient as a person—a unity of body, mind and spirit. Consequently, he does not ignore the patient's mental and spiritual conditions, but acknowledges that body, mind and spirit act and react upon each other. Dr. Edward A. Strecker, author of Mental Hygiene says: "It is not an overstatement to say that fully 50 per cent of the problems of the acute stages of illness and 75 per cent of the difficulties of convalescence have their primary origin not in the body, but in the mind of the patient." Many doctors, recognizing the presence of non-physical factors in illness also freely acknowledge that faith in God and the healing forces which it releases in the individual may be the physician's most powerful ally, and for this reason they welcome the service which the spiritual counsellor can give. It must be said that often where this cooperation was lacking, it was due to ill-advised methods employed by some of the clergy. To wear down the patient's strength with long Scripture passages or to excite him with still longer emotionally charged prayers is unforgivable. One brief suitable verse of Scripture left with the patient, and a prayer of two or three sentences will be far more helpful. I have found that physicians not only permit but eagerly welcome the service of well trained ministers, for they have observed that their patients are helped and reassured by these visits. I have watched the light of hope leap up in the eyes of many a weary and disheartened patient as I have repeated the life-giving words of Jesus.

On the part of the clergy there is also an ever-increasing recognition that the doctor also is an agent of God, and that the pastor and doctor must cooperate closely if the highest well-being of the sick is to be secured. An ancient Hebrew Scripture declares the physician is raised up of God for a divinely appointed task of healing: "Honor a physician according to they need of him with the honors due unto him. . . . His works shall not be brought to an end; and from him is peace upon the face of the earth." An acknowledgment of the truth here expressed is found in the words of Galen of the 2nd century: "I dressed the wound and God healed it." I think there is truth and timeliness in these ancient words today. With such attitudes shown by medical men, is it too much to say that the trend of medical and surgical science is toward agreement that mind and spirit are great influences in curing bodily sickness? Lord Horder, physician-in-ordinary to King George VI writes: "It is clear that there is a definite point of contact between medical science and religion. Not only is there no opposite between medical science and religion. Not only is there no opposite between them, but they can and should be made complementary to each other in relation to both the bodily and spiritual portion of man's life. There exists a common field of action by both doctor and priest, the body and the spirit receiving help along their different yet parallel paths." Both medicine and religion are channels by which divine healing reaches mankind if we believe that "from the Most High cometh healing."

From the pen of one of America's foremost medical scientists comes confirmation of a remarkable phenomenon. Dr. Alexis Carrel writes: "As a physician I have seen men, after all other therapy had failed, lifted out of disease and melancholy by the serene effort of prayer." An eminent professor of Harvard Medical School emphasized the

(Continued on page 460)

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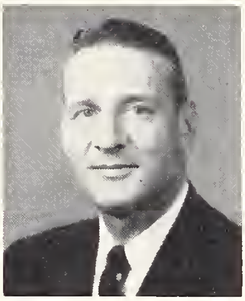
President's Page

Far too few members appreciate the work done and the time devoted to problems of the medical profession by members of the standing and special committees of the Association. Consider, if you will, that most committees meet at night or on Sundays, which are usually times when most doctors have a chance to relax at home or in pursuing their hobbies or other pleasures.



In the minds of the officers and Council, all committees have an equal rating. All of them consider matters that affect medical practice or public health aspects of our professional lives. It may seem that the activities of one or another of the committees have a more direct bearing on more members than some other committee; yet, all committees consider problems or future programs or past actions which may well concern many of our members as well as the public at large.

The new committee chairmen and new members have all been notified of their positions. Several of the committees have already met and reports of their actions will be submitted to the Council at forthcoming meetings of that body.

To these and other chairmen and committee members, may I say that your officers and the Council eagerly await the results of your meetings. The fact finding work of the committees furnishes the information which the Council often needs to formulate its opinions.

The headquarters office stands ready to assist committees with arrangements for your meetings. Please do not hesitate to call on them or your officers.

M.D.

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(1) Payne, R. W.; Shetlar, M. R.; Farr, C. H.; Hellbaum, A. A., and Ishmael, W. K.: J. Lab. & Clin. Med. 45:331, 1955. (2) Bunim, J. J.; Williams, R. R., and Black, R. L.: J. Chron. Dis. 1:168, 1955. (3) Holbrook, W. P.: M. Clin. North America 39:405, 1955.

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EDITORIALS

The Salk Vaccine

Missouri, with the rest of the country, even the world, felt the impact of the importance of the recent approval of the Salk vaccine for the prevention of poliomyelitis. Daily newspapers have made this quite evident by the amount of news and feature material used.

Further testimony to the importance accredited the vaccine by this state is shown in the following resolution introduced in the General Assembly by Senator A. M. Spradling and adopted:

"Whereas, Another inspiring chapter in the long history of medical science was completed April 12, 1955; and

"Whereas, On that date, nearly a half century of medical research, in which many scientists had played some part, culminated in the announcement that the long reign of terror of poliomyelitis had been brought to an end; and

"Whereas, That announcement signalled that man had at last triumphed over the lethal and crippling effects of paralytic poliomyelitis; and

"Whereas, With that announcement an electrifying and exalting message of joy and courage and hope radiated to children and their parents throughout this country and throughout the world; and

"Whereas, The discoverer of the antipolio vaccine is Jonas E. Salk, M.D., therefore be it

"Resolved, That the General Assembly of the State of Missouri hereby, on behalf of the people of Missouri, send its deep thanks to Dr. Salk; and be it further

"Resolved, That the General Assembly of the State of Missouri take appropriate steps to bring to the attention of the awards committee for the Nobel Prize, Dr. Salk's tremendous achievement in the field of research and preventive medicine to the end that Dr. Salk be considered for the Nobel Prize, and be it further

"Resolved, That a copy of this resolution be sent to Dr. Salk, to his proud parents, Mr. and Mrs. Daniel Salk, and to the National Foundation of Infantile Paralysis, whose years of work and millions of research dollars contributed by untold thousands of Americans paved the way for Dr. Salk's memorable achievement."

Following news releases which indicated a rather prohibitive price for the vaccine and a curtailed supply, many county medical societies placed this on their agendas and worked out plans for the distribution of available vaccine that it might go to those most needful of it and at a price that could be met by the average family, many of the societies including plans for taking care of those who cannot pay anything for the vaccine.

Many of these actions by county medical societies were reported in newspapers of their counties. In this connection, the *Dunklin Democrat,* published at Kennett, carried the following editorial:

"Dunklin County's physicians last week took a move which all of us can applaud. Last week the doctors announced that they will administer the Salk polio vaccine to their patients at $3.00 a shot. All three shots will cost only $9.00.

"Compare this figure with the $25.00 announced in some cities and it can be quickly seen that the physicians are doing a good turn for Dunklin countians. Most certainly the doctors were not motivated by a chance for an 'easy and quick buck' as it appears other physicians in other cities are.

"We are certain the doctors in Dunklin County, realizing the importance of the Salk vaccine, were motivated by a desire to help everyone gain immunity from the dreaded disease of polio. Most certainly their action last week represented the highest ideals of their profession."

Man's Conquest of Nature

While viewing Manhattan and the New York area for the first time from atop the Empire State Building one is stunned and rendered speechless by the impressive man-made structures seen below. Truly man has done wonders within the short span of time that has been his to work here.

If, in contrast to this wondrous man-made environment one transfers his viewing platform to the Rocky Mountains atop the great continental divide, he again is rendered breathless and speechless by nature's own creations of architectural splendor. Truly nature has also gone far in her exacting manner.

To say that one picture is more impressive or important than the other would depend entirely on one's point of view and would certainly be open to argument. To say that one is synthetic and the other natural would be more in line with facts. In the conquest of nature by man nature is supreme for she possesses the secrets of the Universe and it is man's destiny to discover them. And discover them he will. His latest and among his greatest achievement is the splitting of the atom with resultant atomic energy and all its by-products. This secret was possessed by nature throughout the ages and released jealously due only to man's tenacity and drive in the conquest of knowledge. He makes many mistakes and at times his assumptions are not based on facts.

In his haste to reproduce nature's products man many times ends up with a synthetic product which, on the surface, appears as an exact replica but lacks a certain something of nature's finished product. So it is with the B-complex vitamins. Synthetically something is lacking. So is it also with synthetic estrogens, particularly in their relation to the treatment of carcinoma of the prostate.

Martyn Schattyn, M.D.

Missouri Legislation—1955

Tom R. O'Brien

This cannot be a final report of action taken by the General Assembly because of the closing date for material to be included in Missouri Medicine. A final report will be included at a later time. The following bills of interest to the medical profession have been acted upon up to May 2.

Senate Bill 226, in Senate Committee on Public Health, provides for a single licensing board to license physicians and surgeons. Sponsored by this Association, the bill has the support of the Missouri Osteopathic Association and the Missouri Hospital Association.

House Bill 85, reported Do Not Pass by House Committee on Public Health, was an effort to make it unlawful to create a joint licensing board.

House Bill 185 provides for changes in the Chiropractic Act. The course in chiropractic is extended to four years and applicants for a license shall be examined in chemistry, bacteriology, diagnosis, x-ray interpretation, embryology, histology and neurology. Defeated in the House Committee on Public Health.

House Bill 186 changes definition of chiropractic as follows: Chiropractic is the art and science of palpating the spinal column; diagnosing, and the adjusting of the movable segments of the spinal column and tissues adjacent thereto by hand. It shall include the use of such supplementary measures as light, heat, electricity, cold, air, water, dietetics, rest and exercise. Defeated in House Committee on Public Health.

House Bill 441, provides that Naturopaths shall be licensed by the State Board of Medical Examiners. Any person who can establish by record or affidavit that he has practiced Naturopathy for three years in this state shall be licensed. Naturopaths shall confine their activities to the practice of physiotherapy, diagnosis and nutritional biochemistry. Defeated in the House Committee on Public Health.

House Bill 243, deals with Optometry. A new definition of optometry is provided as well as other provisions dealing with corporate practice. Amendments, adopted in the House, remove the Association's objections to the original act. Now pending on the final passage Calendar in the House.

House Bill 457, creates a division of registration in the Department of Commerce consisting of all examining and licensing boards, including State Board of Medical Examiners. It provides that the director of the Department of Commerce shall be the director of each of the boards and shall be the secretary of each of them. He shall be responsible for employing all personnel and shall have the full and sole power to make inspections and to see that the statutes are enforced. No examining board shall elect its own secretary, nor employ any person. When a vacancy occurs on any of the examining boards, the Governor shall appoint a layman thereto, who has never practiced the profession involved. Pending in House Committee on Governmental Reorganization.

House Bill 562, creates a special appeals board, appointed by the Governor, composed of the presiding judge of the Supreme Court and two other members, one of whom shall be a member of the profession of the person filing the appeal. Any person denied the right to be examined for a license to practice or after examination is denied a license may, within twenty days, file an appeal and the special appeals board shall consider the matter. The board shall then be bound by the decision of the special appeal court. There is a provision whereby the members of the regular examining board may be guilty of a misdemeanor and subject to damages. Pending in House Committee on Judiciary.

House Bill 374, relating to immunity to suit of any person, corporation or institution of the state when liability insurance is carried, then immunity to suit is waived to the extent of the insurance carried. Defeated in House on final passage.

House Bill 393 deals with the same subject matter as House Bill 374 and further spells out that any type of organization organized for benevolent, charitable, religious, educational or scientific purposes shall be required to give the name of the liability insurance carrier, if any; and shall be deemed to have lost immunity to suit to the extent of the insurance policy limits. Defeated in the House on Perfection.

House Bill 462 provides that the Governor shall appoint the director of public health and welfare who will then appoint the directors of each of the three divisions, namely, public health, mental diseases, and welfare. At present, the Governor appoints all of these persons. The act is in conflict with Senate Bill 60 which provides for a commission to appoint the director of the division of mental diseases. Pending in House Committee on Governmental Reorganization.

Senate Bill 60, has passed the Senate, and provides for a commission of five persons, three of whom shall be physicians skilled in treatment of nervous and mental diseases. The Commission will appoint the director of the division of mental diseases. (Note conflict with House Bill 462.) Pending in House Committee on Governmental Reorganization.

Senate Bill 59 deals with voluntary and involuntary commitment of patients to mental hospitals. Amendments, if adopted by the House, will remove objections the Association had to this act. Pending on House Final Passage Calendar.

Missouri Medical Meetings

Missouri Academy of General Practice, Annual Meeting, Governor Hotel, Jefferson City, Oct. 26-27, 1955.
Missouri State Medical Association, St. Louis, April 8-11, 1956.
St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.
Barton-Dade County Medical Society—third Wednesday of each month.
Benton County Medical Society—meets only on call.
Boone County Medical Society—first Tuesday of each month.
Buchanan County Medical Society—first Wednesday of each month.
Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.
Callaway County Medical Society—third Thursday of each month.
Cape Girardeau County Medical Society—first Monday of each month.
Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.
Clay County Medical Society—last Tuesday of each month.
Clinton County Medical Society—meets only on call.
Cole County Medical Society—first Monday of each month.
Cooper County Medical Society—first Monday after the 15th of each month.
Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.
Dunklin County Medical Society—first Tuesday of each month.
Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.
Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.
Greene County Medical Society—fourth Friday of each month.
Henry County Medical Society—meets only on call.
Holt County Medical Society—meets only on call.
Howard County Medical Society—meets only on call.
Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.
Jasper County Medical Society—second Tuesday of each month, September through May.
Jefferson County Medical Society—meets only on call.
Johnson County Medical Society—meets only on call.
Laclede County Medical Society—second Monday of each month at 6:00 p.m., at the Louise Wallace Hospital, Lebanon.
Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.
Lewis-Clark-Scotland County Medical Society—meets only on call.
Lincoln-St. Charles County Medical Society—third Thursday of each month.
Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p.m.
Miller County Medical Society—meets only on call.
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.
Moniteau County Medical Society—second Thursday of each month.
Newton County Medical Society—meets only on call.
Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.
North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.
Pemiscot County Medical Society—third Thursday of each month.
Perry County Medical Society—second Thursday of each month.
Pettis County Medical Society—third Monday each month September through May.
Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.
Pike County Medical Society—third Tuesday of each month.
Platte County Medical Society—meets only on call.
St. Louis County Medical Society—second and fourth Wednesday of each month.
St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.
Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.
South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.
Vernon-Cedar County Medical Society—meets only on call.
Webster County Medical Society—meets only on call.
West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

On Sunday, April 17, from 12:00 a.m. to 12:30 p.m., KWK-TV and KWK continued its airing of "Medical Problems of Rural Areas," which was initiated on Sunday, March 6 as a prelude to the series of four health education forums, sponsored jointly by the St. Louis Medical Society and the *Globe-Democrat* during March and April.

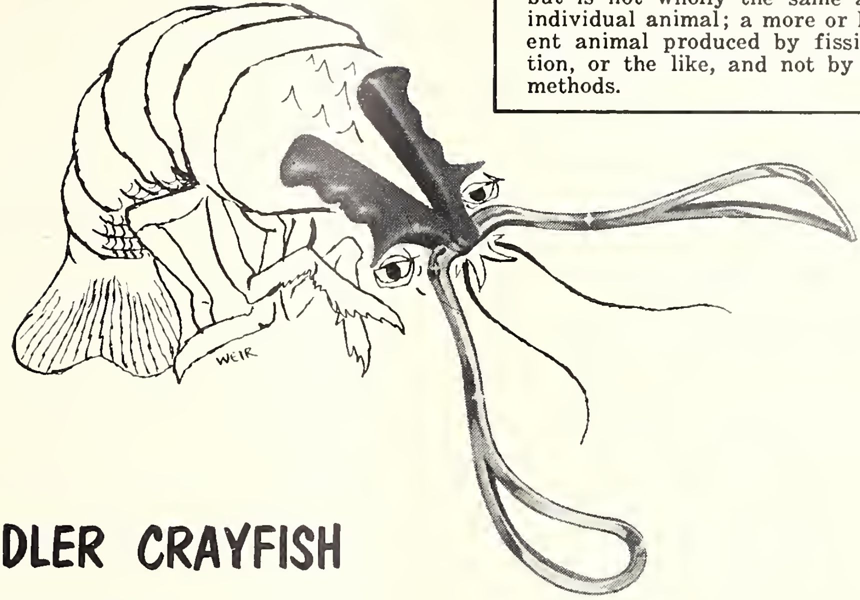
The panel members for both "airings" were: Dr. James Trolinger, Jackson; Dr. Roscoe L. Pullen,

(Continued on page 454)

Panelists pose with Dr. Daniel L. Sexton, president of St. Louis Medical Society, and Dr. James P. Murphy, chairman of Medical and Health Forums of the Society.

The ZOOID ZOO Series

zo'oid (*zō'oid*), *n.* An entity which resembles but is not wholly the same as a separate individual animal; a more or less independent animal produced by fission, proliferation, or the like, and not by direct sexual methods.



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Members in the News

Appearing as guest speaker recently at a dinner meeting of Naval Medical Reserve Company 9-1 and the Army 374th General Hospital Unit at the Officers Club of the Naval Air Station at Lambert-St. Louis Field, was **Roscoe L. Pullen**, M.D., Columbia.

The Trenton Business and Professional Women's Club was addressed on April 4 by **O. F. Duffy**, M.D., Trenton.

A health education series of four meetings for fathers and sons, sponsored by the Linwood Y.M.C.A. of Kansas City, were addressed by **Robert M. Myers**, M.D., Kansas City.

The American Association of Railway Surgeons at an April meeting in Chicago, installed **Richard A. Sutter**, M.D., St. Louis, as president.

Reelected to the Springfield City Council in an election on April 5, **C. Souter Smith**, M.D., Springfield, retired from medical practice on May 1 and will devote her time to civic affairs. She will retain her affiliation with medical organizations.

At the 1955 Annual Conference of Blue Cross and Blue Shield Plans held in Chicago March 22 to 24, Norman A. Welch, M.D., Boston, was elected president of the Blue Shield Commission.

Recently elected officers of the Greater St. Louis Society of Radiologists are **Francis O. Trotter, Jr.**, M.D., president; **Charles J. Nolan**, M.D., vice president, and **Edwin C. Ernst, Jr.**, M.D., secretary-treasurer.

The Ottawa County Medical Society, at a meeting in Miami, Oklahoma, was addressed by **F. Stanley Morest**, M.D., Kansas City, on the subject "Differential Diagnosis and Treatment of Vascular Ulcers of the Extremities."

Appearing on an extension program of the University of Kansas Medical Center, **Charles E. Vilmer**, M.D., Kansas City, spoke in Joplin, Parsons, Kansas, and St. Joseph on April 26, 27 and 28.

At an open forum at the meeting of the College of Chest Physicians in Atlantic City, June 2, on "Minimum Requirements and Adequate Pay Scales for Sanatorium Personnel," **Charles A. Brasher**, M.D., Mount Vernon, will preside.

Physicians are invited to attend the annual conference of the American Physical Therapy Association to be held at Hotel Jefferson, St. Louis, June 20-24.

"Mental Health" was the subject of a talk by **Emmett F. Hoctor**, M.D., Farmington, to the Woman's Club in St. Clair on April 18.

The Missouri Society of Medical Technologists on March 27 elected Sister Ann Marie, R.S.M., St. John's Hospital, St. Louis, as president-elect; Miss Mercedes G. Barry, Kansas City, secretary, and Sister Martin Mary, S.S.M., St. Mary's Hospital, St. Louis, for a two year term as member of the board of trustees.

The Research Staff Nurse Organization was addressed on March 16 by **Robert C. Davis**, M.D., Kansas City.

The Kiwanis Club of St. Joseph was addressed at their March 24 meeting by **Jacob Kulowski**, M.D., St. Joseph.

The Mothers' Forum II of Columbia was addressed on "Emotional Relationship Between Parents and Children" on March 24 by **Henry Guhleman**, M.D., Jefferson City.

The March 29 issue of the *Lexington Advertiser-News* was a special issue in honor of the fifth anniversary of the Lexington Memorial Hospital.

On his 81st birthday, and commemorating fifty years of practice, **J. Lee Harwell**, M.D., Poplar Bluff, on March 30, was presented a silver tray inscribed "Presented to J. Lee Harwell, M.D., by the Butler County Medical Society for 50 Years Humanitarian Service to the Community."

At the annual luncheon of medical alumni of the University of Missouri in Kansas City on March 30, it was decided that a portrait would be painted of **M. Pinson Neal**, M.D., Columbia.

A Chamber of Commerce banquet at Oran on March 29 honored **J. A. Cline**, M.D., Oran. A clock was presented to him. **W. O. Finney**, M.D., Chaffee, was among speakers at the meeting.

A key to the city and an honorary citizen scroll was presented **William A. Sodeman**, M.D., Columbia, by the mayor of New Orleans when he was a speaker there recently.

Participating in the graduating exercises for the 1955 class of the Research Hospital School of Nursing on April 1 were **Walter W. Cummins**, M.D., **Dillard M. Eubank**, M.D., and **Robert F. Wortmann**, M.D., Kansas City.

At a formal ceremony in United States district court in Kansas City on March 23, George Mandler, M.D., Chillicothe, became a naturalized citizen of the United States.

Speaking before the Columbia Rotary Club on April 7, **E. A. Belden**, M.D., Jefferson City, discussed poliomyelitis vaccine.

A five week series of discussions on "Christian Faith and Mental Health" will be given at the Linwood Presbyterian Church, Kansas City, beginning on April 27 by **Paul Hines**, M.D., Kansas City.

The *Richmond Herald* on April 7 carried a long story on the life of **Luther D. Greene**, M.D., Richmond.

A guest speaker at a convention of the Kansas and Missouri State Dental associations, May 15 to 18 in Kansas City, was **Carroll P. Hungate**, M.D., Kansas City.

A certificate of honorary membership was presented **Russell W. Kerr**, M.D., Kansas City, by the Missouri Society of Medical Technologists at a meeting on March 27.

The May radio program of the Buchanan County Medical Society, which was on "Cerebral Palsy," was moderated by **H. Ewing Wachter**, M.D., and panelists were **Ronald M. Buck**, M.D., **Judson M. Hughes**, M.D., **Jacob Kulowski**, M.D., and **Charles F. Shevlin**, M.D.

Speakers at a Sorosis Society meeting in Sedalia on March 21 were **Joseph C. Williams, Jr.**, M.D., and **Warren F. Wilhelm**, M.D., Kansas City.

Director of postgraduate instruction for the Fifth Inter-American Congress of Radiology, meeting in Washington, D. C., April 24 to 29, was **C. Edgar Virden**, M.D., Kansas City.

The Kansas City Metro Club was addressed on March 30 by **Warren F. Wilhelm**, M.D., Kansas City, on "Heart Disease."

Speaker at the Medical Forum at Sedalia on April 19 was **William A. Sodeman**, M.D., Columbia, who talked on "Sensible Dieting."

"When the Psychiatrist Meets the Patient" was the subject presented by **Victor W. Bikales**, M.D., Kansas City, before the Council of Jewish Women on April 11 in Kansas City.

A Central Missouri chapter of the American College of Surgeons was organized at a dinner meeting in Columbia on April 20. Officers elected are **William J. Stewart**, M.D., Columbia, president; **John Modlin**, M.D., Columbia, secretary-treasurer; **A. P. Rowlette**, M.D., Moberly, vice president; **W. A. Bloom**, M.D., Fayette, **Henry Durst**, M.D., Fulton, and **Marshall Kelly**, M.D., Jefferson City, councilors.

Guest speaker at a meeting of the Greater Kansas City Association of Medical Librarians on April 13 was **Joseph E. Welker**, M.D., Kansas City.

In a letter to the editors of the *Ladies' Home Journal*, appearing in the May issue, Leonard A. Scheele, M.D., Surgeon General, U. S. Public Health Service, upholds fluoridation of water supplies. In regard to further details, he refers ". . . and to the report of the Water Fluoridation Committee of the St. Louis Medical Society, which appeared in the February, 1954, issue of MISSOURI MEDICINE, published by the Missouri State Medical Association, 634 North Grand Blvd., St. Louis 3, Missouri."

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Doggett, Sylvester, M.D., Nevada
Ellis, William T., M.D., Columbia
Evans, Alden M., M.D., Columbia
Flynn, Joseph E., M.D., Columbia
Frantz, John A., M.D., Columbia
Frantz, Mary W., M.D., Columbia
Jackson, Robert L., M.D., Columbia
Killough, John H., M.D., Columbia
Lowney, John F., M.D., Columbia
Martin, Joseph L., M.D., Odessa
Rodgers, Dorothy L., M.D., Columbia
Standley, Eugene T., M.D., Columbia
Tsang, John L. K., M.D., Springfield
Ward, Robert L., M.D., Centralia
Wiggins, Roland L., M.D., Columbia

DEATHS

Wescoat, William H., M.D., Cape Girardeau, a graduate of Marion-Sims Medical College, 1898; honor member of the Cape Girardeau County Medical Society; aged 80; died April 1.

Davis, Thomas M., M.D., St. Louis, a graduate of Washington University School of Medicine, 1911; aged 68; died April 5.

Rosenfeld, Herman J., M.D., St. Louis, garaduate of the Ludwig-Maximilians-Universitat, Bavaria, Germany, 1923; member of the St. Louis Medical Society; aged 58; died April 12.

Sartin, John M., M.D., Springfield, a graduate of Tulane University of Louisiana, 1931; member of the Greene County Medical Society; aged 50; died May 2.

MISSOURI HEALTH COUNCIL CONFERENCE

The 7th Annual Spring Conference of the Missouri Health Council was held Friday, April 29, 1955, at the Governor Hotel, Jefferson City. More than 100 people attended this full day session, devoted to important health matters of a state-wide scope.

The opening discussion of the Conference was given by Representative Thomas D. Graham of Cole County, who spoke on “Health Bills Now Before the State Senate and House of Representatives.” In his remarks, he mentioned that this legislative session seemed to have a greater number of bills introduced with designs to eliminate competition.

James R. Amos, M.D., director of the Division of Health of Missouri, gave a “Report on the Division of Health.” He explained briefly the major programs carried on by the Division and some of the problems pertaining thereto. He pointed out categories in which the State Division worked with and assisted local health departments and units. The problem of adequate finances for public health work in Missouri received definite consideration in his remarks. However, he did not go into a detailed analysis of this phase of his department’s concern.

A part of the program, which produced considerable interest, was a panel discussion entitled “Views From the Field as to Urgent Health Needs in Missouri.” Panel discussants included: Ruth C. Tubergen, R.N., supervisor of Nursing Services, Missouri Crippled Childrens Service, Columbia; Alva L. Crow, superintendent of schools, Jefferson City; Victor B. Buhler, M.D., Kansas City, President of the Missouri State Medical Association; Hubert Harris, chief of Bureau of Local Welfare Services, Division of Welfare, Jefferson City.

These panelists presented health needs as they see them from their particular point of vantage. The gamut of needs, or problems, therefore, covered a wide range; including health needs of children, the health problems of the aged, the problems of medical hospital care standards and costs and the difficulties in developing and operating school health programs.

Dr. Buhler, in his remarks, pointed out the value to the public of minimum standards for medical and health care. He explained how the single licensure proposal for those treating the sick in this state would protect the public. He said that the State Medical Association has sponsored this proposal, not with any thought of eliminating competition, but solely from a firm conviction that such a measure is in the public interest and will insure minimum standards for health care.

Dr. Buhler told the group that doctors might have more time to practice medicine if they were not required to spend so much time in politics trying to protect and maintain the all important patient-physician relationship.

During the afternoon session, Jennette A. Gruener, Ph.D., of the Institute of Research in the Social Sciences, University of Missouri, Columbia, presented “Comments Regarding the Medical Care Survey of Indigent Persons in Missouri.”

The final talk of the Conference program was given by Phillip E. Ryan, executive director, The National Health Council, New York, New York. Mr. Ryan spoke on “The Local Health Council—Focus of State and National Planning.” He stressed the value and necessity for working together from the local level up in order to focus united strength on the solution of health problems.

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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Grand River Medical Society

The Grand River Medical Society met April 14, 1955, at the Strand Hotel, Chillicothe. There was a good attendance, both members and Woman's Auxiliary.

After the dinner, the women adjourned to their room where, we understand, they had an interesting program.

The scientific program was presented by Dr. James Lewis, assistant professor of surgery, Medical School, St. Louis University, who discussed "The Why, When and Where of Congenital Cardiovascular Surgery." This was a fine paper and was followed by numerous questions and interesting discussion.

Minutes of the last meeting were read and approved.

There being no further business, the meeting adjourned.

E. A. Duffy, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

W. F. FRANCKA, HANNIBAL, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

The Chariton-Macon-Monroe-Randolph County Medical Society held its regular monthly dinner meeting at the Woodland Hospital, Thursday night, April 14.

The scientific program of the evening included unusual and interesting cases, presented by members of the Society.

Three members of the Society, Dr. Petty and Dr. Miller, of Macon, and Dr. Hawkins, of Salisbury, who attended the closed circuit television meeting held in Kansas City in relation to the releasing of the Salk vaccine, reported their impressions on the TV presentation.

The Society also voted unanimously to charge only $3 for an injection for a polio vaccine given at the physician's office. For those unable to pay, the Society voted to give the vaccine, free of charge, provided the vaccine is furnished by some interested civic organization.

Twenty-one physicians were in attendance at this meeting.

W. D. Chute, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

OTTO KOCH, BRENTWOOD, COUNCILOR

Lincoln-St. Charles County Medical Society

Nineteen physicians attended a dinner meeting of the Lincoln-St. Charles County Medical Society at the Southern Air, Wentzville, Thursday night, April 21.

They were privileged to hear an interesting and practical talk on "Office Gynecology," given by Dr. Roy V. Boedeker of St. Louis.

An extended lively discussion on the subject followed a formal presentation by Dr. Boedeker.

The next meeting of the Society will be held at the St. Charles Hotel on Thursday night, May 26.

Wm. H. Poggemeier, M.D., *Secretary*

Roy Boedeker, M.D., St. Louis, addressing the meeting.

Members remained at the table during the address.

FIFTH COUNCILOR DISTRICT

J. LOREN WASHBURN, VERSAILLES, COUNCILOR

A Conference on "Coronary and Peripheral Arteriosclerosis," under the sponsorship of the University of Missouri School of Medicine and the Missouri Heart Association, was held at the Missouri Student Union Building in Columbia on Thursday, April 14.

The program ran throughout the day, beginning with an opening session at 9:30 a.m. and closing at 4 p.m.

One of the outstanding features of the morning program was a panel discussion on "Treatment of Coronary Sclerosis."

At the noon luncheon session, a question and answer period was held by this panel.

Some seventy-five physicians representing all sections of the state took advantage of this outstanding program.

J. L. Washburn, M.D., *Councilor*

Audrain County Medical Society

The Audrain County Medical Society held its regular monthly dinner meeting, Monday evening, April 18 at the Audrain County Hospital, Mexico.

The program for the evening was furnished by the Missouri Academy of General Practice in cooperation with St. Louis University Medical School, to wit: Panel Discussion, "Recent Advances in the Treatment of Rheumatic Fever," by James P. King, M.D., John J. Inkley, M.D., and Edward Reh, M.D., all of St. Louis.

Fifteen doctors attended the meeting.

T. L. Dwyer, M.D., *Secretary*

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

Henry, Johnson, Pettis, Saline and Adjacent County Medical Societies

A recent dinner meeting of the Henry, Johnson, Pettis, Saline and adjacent county medical societies and the doctors' wives was held Wednesday night, April 20, at the Raines Dinner House, Clinton.

The evening festivities began with a social hour. An outstanding smorgasbord and a most interesting program followed dinner.

The ladies held a separate meeting and were privileged to hear a talk by Mrs. C. Stewart Gillmor of Kansas City about "Old English Silver."

The scientific program for the doctors was given by Dr. C. Stewart Gillmor, Kansas City, on the subject, "Facts and Fallacies in the Management of Arthritis."

A good attendance of some fifty people was on hand to enjoy the full evening program.

Ray Hollingsworth, M.D., *Chairman*
Henry County Medical Society

West Central Medical Society

W. R. Hepner, Jr., M.D., Associate Professor of Pediatrics, University of Missouri Medical School, Columbia, spoke on "Emergencies in the Newborn" at a dinner meeting of the West Central Missouri Medical Society, Thursday evening, April 14, at the Inn Hotel in Butler.

A social hour was held preceding the dinner and Dr. Hepner's discussion. Following the scientific program, a number of Society business matters were discussed.

A. L. Hansen, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Mid-Missouri Medical Society

A meeting of the members of the Mid-Missouri Medical Society and their wives was held in the Pine Room of the Greyhound Bus Station at Rolla on Thursday night, April 28.

Some thirty people were present to enjoy an appetizing dinner followed by an unusually well received scientific presentation by Robert Funsch, M.D., St.

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Wives attended the meeting.

Louis, on "Emergency Treatment of Fractures and Pitfalls in the Treatment Thereof."

M. K. Underwood, M.D., *Secretary*

South Central Counties Medical Society

The South Central Counties Medical Society met for dinner Wednesday night, April 27, at the Antlers Cafe in Mountain Grove with the following members and visitors present: Drs. R. W. Denney, S. W. Connor, H. G. Frame and A. C. Ames, Mountain Grove; J. B. Kelly, Houston; M. B. Perkins, Paul A. Davis, H. W. Miller, Willow Springs, and a new man, expecting to locate there; C. F. Callihan and J. N. Wiles, West Plains, and E. M. Powell, Springfield, and the wives of several of them.

After dinner, the ladies went home with Mrs. Connor for the evening, and the men went to Dr. Connor's office where the meeting was called to order by Dr. J. N. Wiles, vice president, as Dr. C. W. Cooper, president, was not present. The minutes of the January meeting at West Plains were read and approved, as they had not been read; and there were no minutes of the February meeting at Houston.

Dr. Callihan took some pictures of the group. Dr. Hogg was reported to be in the Phelps County Hospital in Rolla, and it was voted to send him a "get well" card.

Dr. Powell then spoke and showed pictures on "Urethritis in Women." Dr. Wiles expressed the thanks of the society to the speaker.

The meeting adjourned to meet in Cabool, May 25.

A. C. Ames, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Mineral Area County Medical Society

The Mineral Area County Medical Society held its regular monthly meeting at the Clinic Building, State Hospital, Farmington, Thursday night, April 28.

The program for the evening, furnished under the auspices of the Missouri Academy of General Practice, was given by Dr. Herbert C. Sweet, St. Louis, who discussed "Exercise in the Emphysematous and Normal Individuals."

C. E. Carleton, Jr., M.D., *Secretary*

Musings of the Field Secretary

(Continued from page 446)

Columbia, dean, University of Missouri School of Medicine; Dr. Andy Hall, Mount Vernon, Illinois, "Doctor of the Year" in 1949, and yours truly.

Mr. Justin L. Faherty, director of civic affairs for the stations and assistants to the publisher of the *Globe-Democrat*, again served as moderator.

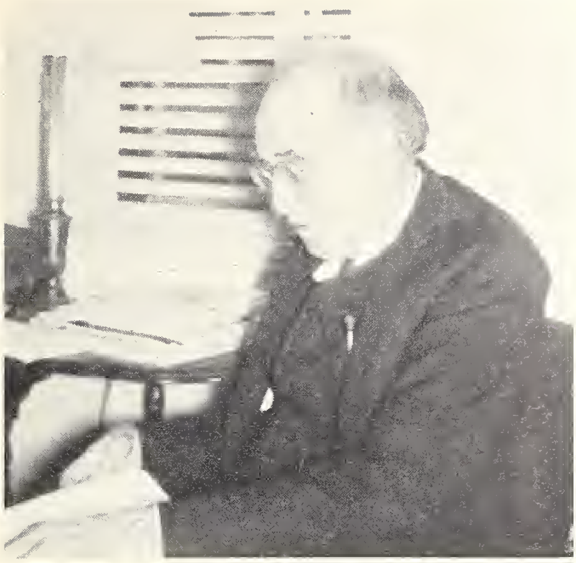
Panel members were asked by Mr. Faherty to answer such questions as: Why don't more doctors locate in rural areas? What does it cost to set up an office, equipped to practice in rural communities? What is the M. S. M. A. doing to get doctors to locate in smaller towns in Missouri? What are some of the plans of the new four year medical school at Missouri University to train more doctors who will be interested in rural practice?

The Kansas-Missouri Anniversity meeting of the American Society of Mechanical Engineers (75th Anniversary) was held at the University of Missouri on April 13, 1955. On that occasion, the "Holley Medal" was awarded to George J. Hood, professor emeritus of the University of Kansas School of Engineering, for his outstanding humanitarian service in the invention and development of the dermatome, a skin-grafting instrument for surgical treatment of severe burns.

The Holley Medal, named for one of the founders of the American Society of Mechanical Engineers, is bestowed by the society for some great and unique act of genius of an engineering nature that has accomplished a great and timely benefit. It would seem that the medical profession may well owe a debt of gratitude to Professor Hood.

It has been well said that the secretary of a county medical society can be the most important "spoke" in the wheel—in some cases, he may even be "the hub." There are a number of fortunate county societies, composing the M. S. M. A., whose secretaries exemplify these potentials. They well deserve to be mentioned herein. However, on this occasion, it is felt that no one will object to singling out one of their number for recognition with a hope that the others may share this recognition vicariously.

Dr. A. C. Ames, Mountain Grove, is secretary of the South Central Counties Medical Society, which is composed of Wright, Douglas, Howell, Oregon, Texas and Ozark Counties. He is 90 years of age and began practice sixty-six years ago. Forty years ago, Dr. Ames was instrumental in organizing the Wright County Medical Society, which has grown to be the present South Central. He has been the secretary for the greater part of the time and has outlined all the doctors in the six counties who were there when he



A. C. Ames, M.D.

began practicing in Wright County forty years ago with the possible exception of one. Twenty years ago, Dr. Ames lost the use of his right hand and almost his life from an infection. Since that time, he has gradually reduced his practice and has now retired; but, he serves as secretary of his medical society, is the local registrar of vital statistics and is active in the work of his local Seventh Day Adventist Church.

Members of the South Central Counties Society maintain that their venerable secretary fully demonstrates the qualities of a top notch secretary.

"Your Role in Building Health Responsibilities in School Communities," will be the theme of a Workshop on Schools and Health, to be held at Warrensburg, June 13, 14 and 15, 1955.

It is hoped that many college students, school patrons, teachers, administrators, nurses, doctors and parent teacher members will attend the workshop.

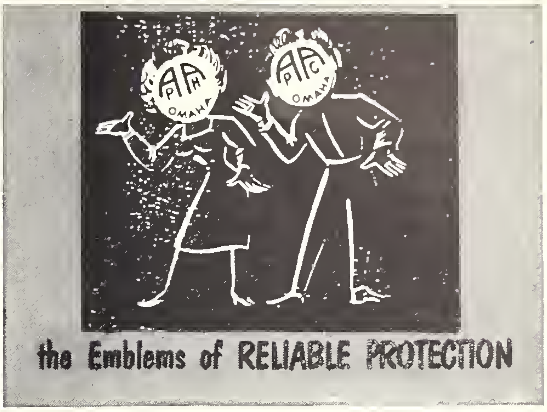
Representatives from the State Division of Health and State Department of Education and some representing voluntary health organizations will be on the program and will help plan for the sessions. There will be panel discussions on the "Needs of Children With Special Problems," on the "Education Challenge of the School Luncheon Program" and on "Positive Physical Education Programs in Smaller Communities."

In addition to these panels, there will be a number of outstanding speakers who will speak on important subjects relating to the theme of the workshop.

For much of the program, those attending will be divided into groups where they will have an opportunity to discuss informally many of the important problems relating to schools and health.

A duplicate of this workshop will be held on the campus of the State College at Cape Girardeau, on June 21, 22, 23, 1955. There will be different people on the program but the theme and subjects to be covered and discussed will be the same.

It is well understood that physicians can contribute much to workshops of this nature. It is hoped, therefore, that a number of physicians in west central and southeast Missouri will attend at least a part of these workshops and make their contributions toward the objectives of these two endeavors.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News From the Medical Schools

UNIVERSITY OF MISSOURI

Postgraduate Activities: Dr. M. Pinson Neal, Professor of Pathology, and Dr. C. M. Waggoner, Clinical Associate in Radiology, participated in the Postgraduate Assembly in Springfield, Missouri, on March 16, sponsored jointly by the School of Medicine and the Greene County Medical Society. Dr. Joseph E. Flynn, Professor of Pathology, and Dr. William A. Sodeman, Professor of Medicine, conducted a Clinical-Pathologic Conference at the monthly Postgraduate Meeting on March 17 in Columbia, sponsored jointly by the School of Medicine and the Missouri Academy of General Practice. Dr. Hugh E. Stephenson, Jr., Assistant Professor of Surgery, discussed the surgical management of peptic ulcer. On March 18, 19, Dr. Stephenson attended an International Symposium on Cardiovascular Surgery in Detroit, Michigan. On March 26 and 27, Dr. C. K. Leeper, Assistant Professor of Pathology, and Dr. E. T. Standley, Assistant Professor of Pathology, attended the Joint Meeting of the South Central Region of the College of American Pathologists in Kansas City, Kansas, and Drs. Leeper and Standley appeared on the program. On March 24, Dr. Henry Guhleman, Instructor in Psychiatry, spoke to the Mothers' Forum in Columbia on "Emotional Relationships Between Parents and Children."

Several members of the Faculty attended the Annual Session of the Missouri State Medical Association in Kansas City. Dr. Robert L. Jackson, Professor and Chairman of the Department of Pediatrics, and Dr. Clarence D. Davis, head of the Department of Obstetrics, addressed the Missouri State Medical Association at its annual session in Kansas City. Dr. Thomas H. Alphin, Associate Professor of Anatomy and Assistant Dean of the School of Medicine, addressed the University of Missouri Medical Alumni Association at its annual luncheon in Kansas City on March 30. Dr. Alphin likewise attended the Civil Defense Conference of the Missouri State Medical Association meeting in Kansas City on March 28 and 29. Dr. Robert L. Jackson, Professor and Chairman of the Department of Pediatrics, attended the Interim Council Meeting of the Food and Nutrition Board of the American Medical Association in Nashville, Tenn., on April 3-7. The following members of the Department of Anatomy attended the Annual Meeting of the American Association of Anatomists in Philadelphia, Pa., from April 4-10: Dr. M. D. Overholser, Professor of Anatomy and Chairman of the Department, Dr. E. W. Lowrance, Associate Professor of Anatomy, Dr. E. D. Bueker, Associate Professor of Anatomy, Dr. Stuart Landry, Instructor in Anatomy, and Mr. F. E. Doenges, Assistant Instructor in Anatomy. The following members of the Faculty attended the Annual Meeting of the Federation of American Societies for Experimental Biology meeting in San Francisco, Calif., from April 11-16: Dr. B. A. Westfall, Professor and Chairman of the Department of Physiology and Pharmacology, Dr. D. K. Meyer, Associate Professor of Physiology, Dr. W. S. Platner, Associate Professor of Physiology, Dr. Alan Sexton, Instructor in Physiology, and Dr. T. D. Luckey, Professor and Chairman of the Department of Biochemistry. Dr. Sexton presented a paper.

Dr. William A. Sodeman, Professor and Chairman of the Department of Medicine, addressed the Annual Session of the American Academy of General Practice, meeting in Los Angeles, California, on March 28. On March 31, Miss Virginia Harrison, Associate Professor of Nursing and Acting Director of the School of Nursing, and Miss Joan Walsh, Instructor in Nursing, attended the meeting of the Missouri State Board of Nursing in Jefferson City. On April 14, Dr. W. R. Hepner, Jr., Associate Professor of Pediatrics, addressed the West Central Missouri Medical Society in Butler, Missouri.

Lectureships: The Annual Lectureship sponsored by the Tau Chapter of the Phi Beta Pi Medical Fraternity, took place on March 25 and featured Dr. O. M. Helmer, Director of the Lilly Research Laboratories, Department of Physiological Chemistry, Indianapolis, Indiana. Dr. Helmer spoke on "The Etiology of Hypertension."

The Second Annual Missouri Heart Day, sponsored by the Missouri Heart Association and the School of Medicine in cooperation with the Adult Education and Extension Service, was held on April 14. Guest speakers included Dr. Grey Diamond, Professor and Chairman of the Department of Anatomy, Kansas University Medical Center, and Dr. Jere Lord, Professor of Clinical Surgery, New York University Postgraduate School of Medicine, New York City, N. Y. Approximately eighty-eight physicians attended this session.

The Second Annual Symposium on the Management of Athletic Injuries was held at the Memorial Student Union in Columbia on March 24 for coaches, trainers and physicians of the High Schools throughout the State of Missouri. Members of the Faculty participating in the Symposium included Dean Roscoe L. Pullen; Dr. Hugh E. Stephenson, Jr., Assistant Professor of Surgery; Dr. William J. Stewart, Associate Professor of Orthopedic Surgery; Dr. Glen McElroy, Clinical Associate in Orthopedic Surgery; Dr. James Baker, Clinical Associate in Surgery, and Dr. D. K. Meyer, Associate Professor of Physiology.

WASHINGTON UNIVERSITY

Dr. Mildred Trotter, Professor of Gross Anatomy and consultant in anatomy to the Mallinckrodt Institute of Radiology, was elected president of the American Association of Physical Anthropologists at a recent (April 4-6) meeting at the Jefferson Medical College in Philadelphia. Dr. Trotter is the first woman president of the twenty-five-year-old association. She will serve a two-year term.

Dr. George Canby Robinson, Baltimore, dean of Washington University Medical School from 1917 to 1920, visited in St. Louis recently with former associates and collected data for a medical history. He discussed changes in the school with Drs. Philip A. Shaffer, Joseph Erlanger and Robert J. Terry, all emeritus professors who were instrumental in the reorganization of the school along present lines of medical education between 1910 and 1915. Dr. Shaffer also is a former dean of the Medical School.

The American Board of Orthopedic Surgery held Examination Part I for ninety-two candidates for certification at the Medical School April 8-9. The written and oral examination was given to candidates from various parts of the United States. Dr. Richard T. O'Dell, Associate Professor of Clinical Orthopedic Surgery, was in charge of local arrangements.

Examiners from the Washington University staff included Drs. Odell, J. Albert Key, Professor of Clinical Orthopedic Surgery; Lauren V. Ackerman, Professor of Pathology and of Surgical Pathology; Fred C. Reynolds, Associate Professor of Clinical Orthopedic Surgery; H. Relton McCarroll, Assistant Professor of Clinical Orthopedic Surgery; William R. Murphy, Assistant in Pathology; C. Barber Mueller, Assistant Professor of Surgery and Assistant Dean; Lee T. Ford, Jr., Instructor in Clinical Orthopedic Surgery, and Edward C. Holscher, Instructor in Clinical Orthopedic Surgery.

Dr. Evarts A. Graham, Bixby Professor Emeritus of Surgery, spoke at the "Kick Off Dinner" of the Madison County Chapter of the American Cancer Society March 31 at Alton, Ill. His subject was "A Half Century of Results in the War Against Cancer."

The 20th annual Leo Loeb lecture, sponsored by Mu chapter of Phi Beta Pi medical fraternity of Washington University Medical School, was given April 12 by Dr. Tinsley R. Harrison, Professor of Medicine and head of the department at the Medical College of Alabama, Birmingham. He discussed "Precordial Pulsations: Some Clinical and Physiological Aspects." Dr. Loeb, in whose honor the annual lecture is given, is well known for his work on cancer. He is Professor Emeritus of Pathology.

Alpha of Missouri chapter of Alpha Omega Alpha, the Washington University School of Medicine chapter of the national medical honor society, initiated fifteen members at an annual banquet April 20. Dr. David Goldring, Associate Professor of Pediatrics, gave an informal address.

Senior medical students initiated are Oliver Abel, III, A. Robert Arnstein, H. Phil Gross, Stephen I. Morse, David G. Murray, James C. Peden, Jr., and Nina L. Steg. Junior class initiates are Harold R. Silberman, president-elect of Alpha Omega Alpha for the school year 1955-56; Daniel M. Divack, vice president-elect; and Robert M. Filler.

Faculty members initiated are Drs. Goldring; Lauren V. Ackerman, Professor of Pathology and of Surgical Pathology; John R. Smith, Associate Professor of Internal Medicine, and W. Stanley Hartroft, Professor of Pathology and head of the department, who is an honorary member. Dr. Theodore J. Fuller, a recent graduate, also was initiated.

The American Board of Neurological Surgery Examination for forty-four candidates for certification was held April 28-30 at the Medical School. To be eligible for examination candidates were required to have approved residencies in neurological surgery and a minimum of two years of independent practice. Each candidate was examined by one of the twelve Board members and a doctor from the Medical School.

In addition to Dr. Leonard T. Furlow, Associate Professor of Clinical Neurological Surgery, who is a Board member, examiners from the Medical School were: Drs. Eugene M. Bricker, Associate Professor of Clinical Surgery; Edward W. Dempsey, Professor of Anatomy and head of the department; Andrew B. Jones, Associate Professor of Clinical Neurology; Carl E. Lischer, Assistant Professor of Clinical Surgery; Carl A. Moyer, Bixby Professor of Surgery and head of the department; Henry G. Schwartz, Profes-

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sor of Neurosurgery; William B. Seaman, Associate Professor of Radiology, and David E. Smith, Associate Professor of Pathology.

Dr. Alexis F. Hartmann, Professor of Pediatrics and head of the department, discussed "Disturbances in Carbohydrate Metabolism and Their Clinical Manifestations" at a meeting of the Atlanta Clinical Society March 23.

Dr. Robert Elman, Professor of Clinical Surgery, recently spoke at annual meetings of the Missouri State Medical Association in Kansas City and the John A. Andrew Clinical Society at the Tuskegee Institute, Tuskegee, Ala. He discussed "Medical Responsibility in Rehabilitation Programs" and "Breast Cancer," respectively. At Tuskegee Dr. Elman delivered the first memorial lecture in honor of Dr. Charles R. Drew, Negro physician and wartime authority on blood plasma for anti-shock therapy.

Dr. Albert Roos, Associate Professor of Physiology and of physiology in surgery, was the visiting lecturer in physiology at Vanderbilt University School of Medicine March 14-18. He spoke on various aspects of circulatory and pulmonary physiology.

Dr. Phillip H. Starr led a series of three institutes on "An Analysis of the Clinical Practices of the Child Guidance Clinic With Reference to Child Welfare Agencies" at the Southwest Regional Conference of the Child Welfare League of America March 29-30 in St. Louis. Dr. Starr is assistant professor of psychiatry and of pediatrics and director of the Child Guidance Clinic at the Medical School.

Other consultant and staff members of the clinic who participated in the conference are: Dr. Alex H. Kaplan, Instructor in Clinical Psychiatry; Dr. Mary Mills, Instructor in Clinical Psychiatry; Dr. Paul Painter, Instructor in Clinical Child Psychiatry; Miss Mary Schulte, Instructor in Psychiatric Social Work; Dr. Loretta Cass, Assistant Professor of Medical Psychology, and Mrs. Louetta Berger, a social worker.

Dr. Joseph H. Ogura, Associate Professor of Otolaryngology, discussed "Surgical Pathologic Basis for the Treatment of Cancer of the Larynx and Hypopharynx" at a meeting of the Oregon Academy of Ophthalmology and Otolaryngology March 28 in Portland. From March 19 to 28 he attended a course in nasal reconstruction at the University of Oregon.

Recent visitors at the Medical School were Dr. J. C. Boyd, professor of anatomy at Cambridge University, England, who spoke to the graduate staffs of the departments of anatomy and gynecology on "The Vascular Pattern in the Uterus During Pregnancy"; and Dr. William Boyd, professor emeritus of pathology at the University of Toronto. In addition to speaking to medical students of Washington and St. Louis universities, Dr. William Boyd discussed "Cause and Effect" at a meeting of the St. Louis Pathological Society.

SAINT LOUIS UNIVERSITY

Appointments: The appointment of eight new School of Medicine faculty members was announced April 12. Appointed as an instructor in internal medicine was Dr. Andrew L. Hahn, Ft. Leonard Wood, who was awarded his M.D. from the University of Texas Medical Branch, and took his undergraduate work at the Rice Institute. Appointed as an assistant in gynecology and obstetrics was Dr. Frank J. Valach, St. Louis, who was awarded his B.S. from St. Procopius College and his M.D. from Stritch School of Medicine (Loyola University). Appointed as an assistant in neurology and psychiatry was Dr. Robert Rochman, who was awarded his A.B. and M.D. from Washington Uni-

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versity. Appointed as assistant in ophthalmology was Dr. James W. Nofles, who was awarded his M.S. and M.D. degrees from Howard University.

Four doctors were appointed as assistants in internal medicine. They are: Dr. Murray Chinsky, St. Louis, who was awarded his B.S. from the University of Missouri, and his M.D. from Washington University; Dr. Henry T. Cooper, who took his undergraduate studies at Seton Hall College and was awarded his M.D. from Saint Louis University; Dr. Sidney Goldenberg, St. Louis, who was awarded his B.A. and B.S. degrees from the University of Missouri and his M.D. from State University of Iowa, and Dr. Albert M. Huggins, Overland, Mo., who took his undergraduate work at Louisiana State University and was awarded his M.D. from the University of Illinois.

Lectures: Dr. J. Scott Butterworth, associate professor of medicine at New York University Post-Graduate Medical School and developer of the teaching cardioscope, was the guest speaker at a two day cardiac auscultation course held at Firmin Desloge Hospital May 11 and 12. The course, sponsored by the Department of Cardiology, was under the direction of Dr. James G. Janney, assistant professor of clinical medicine and Director of Cardiology, and Dr. Donald W. Bussman, instructor in internal medicine.

The cardiac auscultation course—built around the teaching cardioscope—was closed to thirty-five physicians. Faculty members who spoke before the scientific sessions included: Drs. Janney and Bussman; Dr. John J. Inkley, instructor in internal medicine; Dr. Chester P. Lynxwiler, assistant professor of clinical pediatrics; Dr. J. F. Gerald Mudd, instructor in internal medicine; Dr. John Nuetzel, instructor in internal medicine; Dr. Robert Potashnick, senior instructor in internal medicine, and Dr. John W. Berry, instructor in internal medicine. Panel participants included: Dr. David B. Flavan, assistant professor of clinical medicine; Dr. John J. Hammond, assistant professor of clinical medicine; Dr. E. Lee Shrader, associate professor of internal medicine and Director, Saint Louis University Student Health Service.

The course was presented through use of a grant provided by the Missouri State Department of Health from funds of the United States Public Health Service.

Dr. C. Rollins Hanon, professor of surgery and director of the department, and Dr. James E. Lewis, Jr., assistant professor of surgery, attended the meeting of The American Association for Thoracic Surgery in Atlantic City, April 24, 25 and 26; and the American Surgical Association meeting in Philadelphia April 27, 28 and 29.

Dr. D. Elliott O'Reilly, senior instructor in orthopedic surgery and medical director, Cerebral Palsy Training Center, Firmin Desloge Hospital, participated in a symposium titled "The Handicapped Child" held at the Central Institute for the Deaf in St. Louis, April 2.

Dr. Joseph A. Hardy, associate professor of gynecology and obstetrics and director of the Department, lectured before a meeting of general practitioners (G.P.-P.G. Club) held at St. Francis Hospital in Washington, Missouri, May 10. Dr. Hardy spoke on "Prolonged Labor."

Dean James W. Colbert, Jr., will speak before the Catholic Hospital Association Convention, May 17. His topic will be "Developments of Medicine and Their Implications for Hospitals."

Dr. J. Godwin Greenfield, Emeritus Neuropathologist of the National Hospital for Neurological Dis-

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Bumbalo, T. S., Gustina, F. J., and Oleksiak, R. E.:
J. Pediat. 44:386, 1954.

White, R. H. R., and Standen, O. D.:
Brit. M. J. 2:755, 1953.

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Brown, H. W.:
J. Pediat. 45:419, 1954.

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eases, Queens Square, London, lectured before the School of Medicine students and faculty April 18. Dr. Greenfield was the guest of the Pathology Department.

Honors: Dr. Edward A. Doisy, distinguished service professor of biochemistry, and director of the department of Biochemistry, was one of three new council members elected by the National Academy of Sciences at its annual meeting in Washington, April 26.

Travel: Dr. Louis L. Tureen, assistant professor of clinical neurology and Psychiatry and Director of the Neuropsychiatric Clinic will return to Saint Louis this month (May), following his 4½ months of study tours under appointment at the Neurological Institute, National Hospital in London. During his stay abroad, Dr. Tureen has toured and studied neurological and psychiatric clinics in Amsterdam, Holland; Freiburg, Germany; Paris, Marseilles, France; and Naples, Italy.

Religion and Art of Healing

(Continued from page 438)

importance of the spiritual outlook and attitude of the doctor: "The physician will always need the support of a true religion, a simple faith in God. Thus the believing physician can often bring into perfection a cure not otherwise obtainable. There is no place in this profession for the agnostic or atheist." Dr. William S. Sadler, medical scientist who has made a notable contribution to increased cooperation between religion and science, writes: "Faith is an actual remedy for those physical ills which result from doubt, depression and discouragement. I make this statement as a physician and surgeon. Fear is the cause of worry and nervousness which are responsible for most of the functional diseases. Faith, courage, confidence and optimism are the only cures for fear. They are back of every kind of mind cure. And religious faith is the master mind cure."

We are glad that at times the scientist has become the preacher. It is fitting that an authoritative statement should come from those skilled men who have made physiology their special province. Dr. Carrel writes: "Certain spiritual activities may cause anatomical as well as functional modifications of the tissues and organs. These organic phenomena are observed in various circumstances, among them being the state of prayer." Anyone conversant with the present trend of medical thought is well aware that Dr. Carrel's is not a solitary voice crying in a wilderness. His convictions are shared by many medical scientists who are leaders in their respective fields. Dr. Stanley Cobb, chief psychiatrist at the Massachusetts General Hospital, has clarified this issue: "The line between the organic and the functional and between the physical and the mental is an artifact. The body acts as a whole organism, and anything that happens in that organism is organic. Structural and functional are inseparable." His viewpoint is in accord with the oft quoted dictum of the *British Medical Journal:* "No tissue of the human body is wholly removed from the influence of the spirit." Much research must yet be expended and many careful observations recorded before we shall have anything like an accurate knowledge of the operation of spiritual therapy on the human organism. Our present understanding in this field is somewhat akin to the knowledge of medicine fifty years ago. Perhaps we have the right to believe that in the not too distant future, medical scientists will join with Christian ministers in seeking to understand and explain the ways in which spiritual influences work for the healing and strengthening of bodies and minds. Far-sighted leaders in science have always known that a one-sided approach to the vast subject of healing is inadequate. Hippocrates, the Father of Medicine, says: "In order to cure the human body, it is necessary to have a knowledge of the whole of things." And Paracelsus, the Swiss doctor of the 15th century declares: "True medicine only arises from the creative knowledge of the last and deepest powers of the whole universe; only he who grasps the innermost nature of man can cure him in earnest." The one indispensable element of all true healing is faith, that mighty spiritual force which eludes the test tube and the methods of the laboratory, and yet provides inexhaustible reserves of energy for human welfare. As medical science abandons its materialism and the Church recovers from its fear of scientific truth, the physicians of the body and the physicians of the spirit will find a common basis for the fullest cooperation. Together they will explore the marvelous effects produced by an active faith and utilize these in maintaining the health of those who are well and in healing those who are ill. Then the no man's land between science and religion, which has been a prolific breeding ground of all manner of extreme healing cults, will be cleared away and medicine and religion will find a common goal in God's purposes for the well-being of all His children.

BOOK REVIEWS

The Nursing Mother, A Guide to Successful Breast Feeding, by Frank Howard Richardson, M.D., Licentiate American Board of Pediatrics, F.A.C.P., F.A.A.P. Prentice-Hall, Inc., New York. Price $2.95.

This is an excellent book. Written specifically to assist the average mother in nursing her child successfully, it contains much to interest pediatricians and obstetricians as well. The psychologic advantages of breast feeding are stressed. Other advantages are well contrasted with the disadvantages. Specific directions for the preparation of the breasts for nursing are given. Information concerning nursing brassieres, nipple shields, breast pumps and other equipment used by nursing mothers is included. The comprehensive list of questions and answers should prove useful. A consistent effort has been made throughout to dispel the many superstitions about breast feeding which have kept many a mother from nursing her child. The illustrations are well chosen, informative and well printed. This book should be required reading for every expectant mother. It would do no harm if doctors would read it too.

When Minds Go Wrong. The Truth About Our Mentally Ill and Their Care in Mental Hospitals, by John Maurice Grimes, M.D., Formerly staff member of the Council on Medical Education and Hospitals, American Medical Association; Author of "Institutional Care of Mental Patients in the United States." The Devin-Adair Company, New York. 1954. Price $3.50.

This work expresses the writer's highly individualistic ideas about the state care of the mentally ill. Many would not agree with most of these ideas but the writer does make some good points. The biggest trouble with state care, for example, is politics, whether concept or just the other kind. Also probably the best remedy is civil service and lay boards of control. It is not true, however, that finances is no obstacle. With all the pressure groups of modern politics, the state hospitals, having no pressure on their behalf, are crowded out.

Another good idea expressed in the book is that there is a need for provisions for those who are dependent, from age or whatever case but especially ill. This group might even be made self supporting. But nobody has yet been great enough to think how this end could be achieved. Certainly just putting up some buildings is not the best answer.

Unfortunately the writer rejects newer methods of treatment such as lobotomy, electric shock and perhaps even drugs.

L. B. A.

A Doctor Talks to Women. What They Should Know About the Normal Functions and Common Disorders of the Female Organs, by Samuel Raynor Meaker, M.D. Simon and Schuster, New York. 1954. Price $3.95.

The author, who is Professor Emeritus of Gynecology at Boston University School of Medicine, has presented in his book a concise description of anatomy, physiology and pathology of the female reproductive system. There is found a well written explanation for all gynecologic manifestations from puberty to the postmenopause. These are under twenty-nine chapter headings which include such things as abnormal bleeding, psychosomatic medicine, endocrine function and fertility and sterility. Even therapy is discussed simply and in a way to include most of the commonly accepted modes of management of gynecologic problems. Although written in light style, in some instances it appears as though the author's descriptions and explanations are too scientific with terminology that probably exceeds the grasp of the average lay woman for whom the book was intended. This is rectified to some degree by the inclusion of an adequate glossary at the end of the book.

In general, the book is one to be recommended to the average woman for the following reasons: it describes normal anatomy and physiology of which most women have inadequate knowledge, and it makes the average woman aware of abnormalities

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for which a physician should be consulted. It is indeed the "handy home reference manual" which will benefit any woman who purchases it and reads it.

H. J. W.

Lectures on the Thyroid, by J. H. Means, M.D., Jackson Professor of Clinical Medicine Emeritus, Harvard University; Former Chief of Medical Services, Massachusetts General Hospital; Physician, Massachusetts Institute of Technology. Harvard University Press, Cambridge. 1954. Price $3.00.

This book is an excellent series of lectures given by this well known thyroid authority from June of 1949 through April of 1953 at various centers, both in this country and in England. The subjects vary from a complete study of the thyroid hormone, its metabolism and action to a discussion of the need of iodine in various areas of the world.

It is cleverly written and extremely thorough. An excellent discussion of the pituitary-adrenal axis and its reaction on other endocrine glands, notably the thyroid, is given. The thyroid hormone is thoroughly discussed from the standpoint of metabolism of iodine in the normal and hyperthyroid and myxedematous patient. The effect of antithyroid drugs, of radiation therapy and of radioactive iodine is covered in a thorough manner.

Finally there is an excellent discussion on the etiology of Graves's disease and of the need of iodine in human economy.

This book is certainly recommended for those practitioners and students who have more than an average interest in thyroid diseases.

J. P. M.

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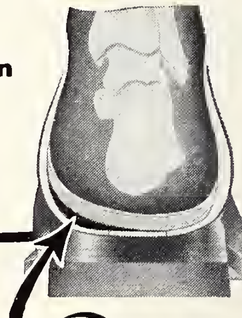
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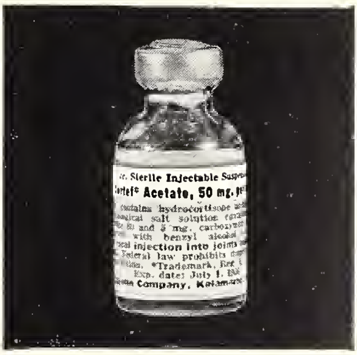
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Book Reviews

May's Manual of the Diseases of the Eye. For Students and General Practitioners. Twenty-First Edition Revised and Edited by Charles A. Perera, M.D., Associate Clinical Professor, College of Physicians and Surgeons, Columbia University, New York; Attending Ophthalmologist, Presbyterian Hospital, New York. With 378 Illustrations including 32 plates, with 93 colored figures. Williams & Wilkins Company, Baltimore. 1953. Price $6.00.

The fact that this standard textbook of diseases of the eye has passed through twenty-one editions attests not only to its original worth, but also to its continued usefulness.

The content and format of the present edition is essentially similar to those of its predecessors. The necessary revisions in the text and in the illustrations have been made so that this textbook still conforms with the modern trends in ophthalmology.

In their aim to make this textbook one for the medical student and the general practitioner, the authors are successful. Undoubtedly this book will continue to be the standard elementary textbook for diseases of the eye. T. E. S.

The Physician and His Practice. Edited by Joseph Garland, M.D., Editor, The New England Journal of Medicine. Little, Brown and Company, Boston. 1954. Price $5.00.

This volume is intended for the young physician who is about to embark on the practice of medicine. Its purpose is to guide him not only in the selection of the type of practice he will conduct, but also in his personal, community, hospital and teaching activities. There also are chapters devoted to the mechanics of business management and office affairs.

Eighteen contributors have each written a chapter, which are presentations of the essence of as many different facets of the problem of medical practice. The editor has selected contributors who are not only well versed in their own particular facet, but are capable of portraying it clearly.

Since it is a treatise on the attainment of perfection it is a valuable guide for both young and old.

C. J. S.

Atlas of Orthopedic Traction Procedures by Carlo Scuderi, B.S., M.D., M.S., Ph.D., Clinical Associate Professor of Surgery, University of Illinois; Professor of Surgery, Cook County Graduate School; Attending Surgeon, Cook County Hospital; Chairman of Department of Orthopedic Surgery, St. Elizabeth's Hospital and Columbus Hospital; Senior Orthopedic Surgeon, Alexian Brothers' and St. Anne's Hospitals; Consulting Orthopedic Surgeon, Augusta Hospital, Chicago; Consulting Orthopedic Surgeon, McNeal Memorial Hospital, Berwyn, Illinois. With 124 Illustrations. C. V. Mosby Company, St. Louis. 1954. Price $12.50.

Dr. Scuderi has written a complete, authoritative, encyclopedic atlas of orthopedic traction procedures.

There are 124 line drawings and photographs which beautifully illustrate its 230 pages. All standard methods of traction are pictured. The written text describes the indications for each, the materials required and, where necessary, detailed technic is given.

The various types of hospital beds, fracture beds, Balkan frames and other types of overhead frames are represented. The Stryker frame is illustrated. Methods of applying skull and other types of skeletal traction are described.

It is a book that should be on the nurses' desk in every orthopedic ward and in the library of every orthopedist and surgeon interested in traction.

R. M. O'B.

Geriatric Medicine, Medical Care of Later Maturity. Edited by Edward J. Stieglitz, M.S., M.D., F.A.C.P., Consulting Internist, Suburban Hospital, Bethesda, Maryland, and Washington Home for Incurables; Consultant in Geriatrics, Chestnut Lodge, Rockville, Maryland; St. Elizabeths Hospital and Veterans Administration; Associate, Washington School of Psychiatry; Lecturer in Industrial Medicine, New York University-Bellevue Post-Graduate Medical School; Chairman, Advisory Council on Professional Education, Commission on Chronic Illness; Consulting Editor, Geriatrics. Third Edition. 205 Figures. J. B. Lippincott Company, Philadelphia. 1954. Price $15.00.

This substantial book of 718 pages, plus index, divided into eight sections and forty-two chapters, contributed by some forty-eight authors of considerable eminence, extensively covers what is known about the care of the senescent.

Unfortunately, this reviewer believes that most physician readers will find this book a disappointment. Most of the material is fairly familiar to the practicing physician and he will resent reading so many pages to discover so few gems of information.

The one chapter that can be recommended is Chapter 17 by Wm. B. Kountz, on "Dysfunctions of the Thyroid, the Gonads and the Adrenals."

In general, the book is well written but it seems that a good bit of pruning would have helped.

B. S. P.

Drugs in Current Use—1955. Edited by Walter Modell, M.D., F.A.C.P., Associate Professor, Clinical Pharmacology, Cornell University Medical College. Springer Publishing Company, Inc., New York. 1955. Price $2.00.

The purpose of this small volume is to provide a concise and useful statement of the principal pharmacologic characteristics of each of the drugs now in common use, together with information as to its major uses, therapeutic and toxic actions, dosage and other properties.

In the words of the author, who is associate professor of clinical pharmacology at Cornell University, it is an attempt to provide a capsule account of the data essential to the safe handling of a drug. Since the book quite obviously fulfills its aims, it will be of great value to any one who practices medicine.

C. J. S.

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98th Annual Session, St. Louis
April 8-11, 1956

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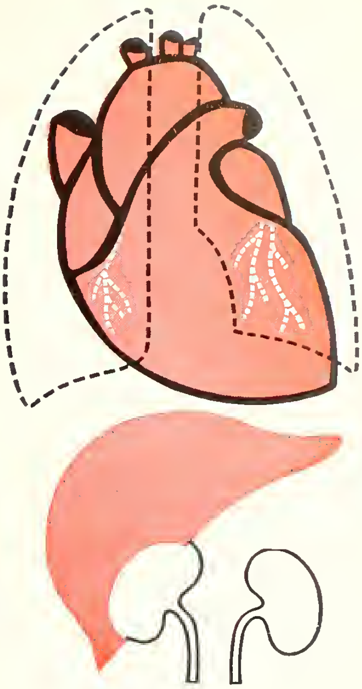

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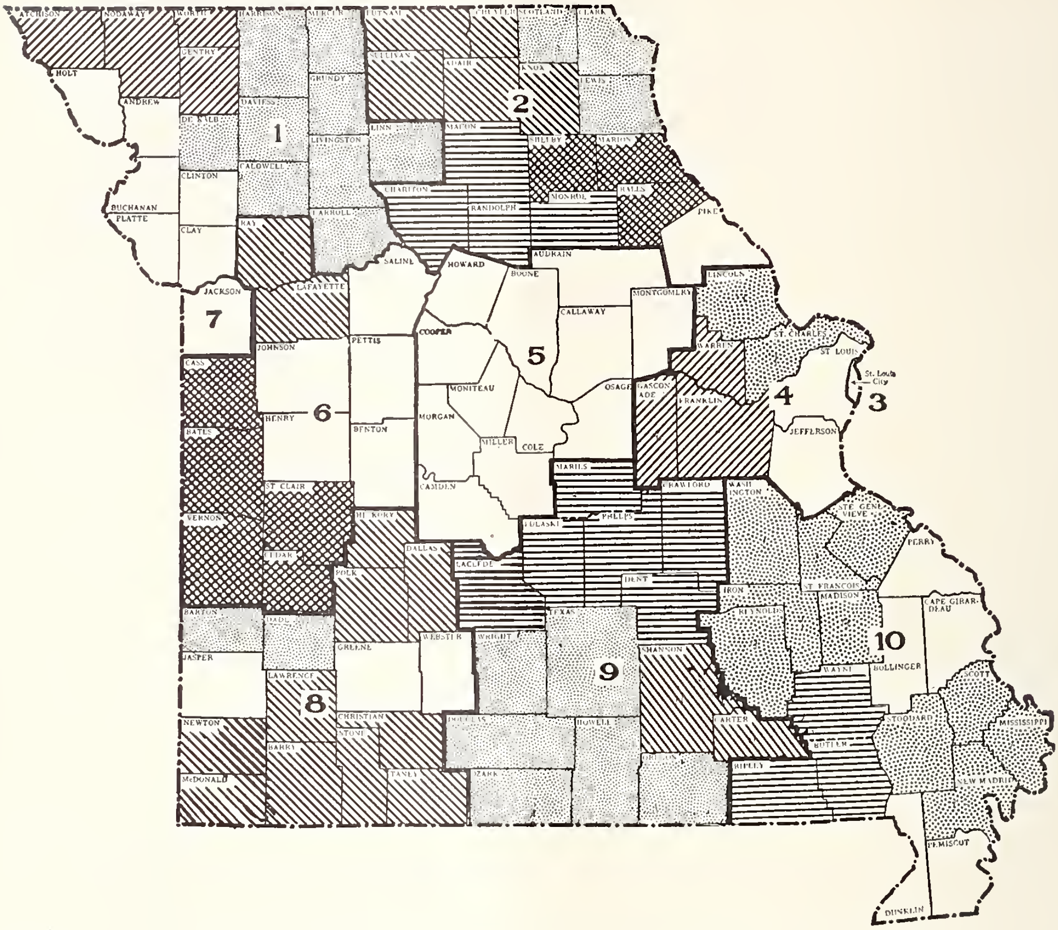
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Meat...

and the Problem of Senile Osteoporosis

Perhaps under the still-persisting influence of the mistaken "health legends" of former days, many older people tend to eat less meat and other nutritionally valuable protein foods than they should; thus, the osteoporosis that occurs naturally in the aging body may be unduly augmented.[1]

A balanced diet supplying optimal amounts of protein is essential, and appears to be useful in preventing and in slowing the progress of osteoporosis in senile persons. Adequate protein intake is instrumental in supporting osteoblastic activity so necessary for production of osseous matrix. "When osteoporosis is present, the prime objective is an adequate, high protein diet (a gram or more [of protein] per kilogram of body weight), to aid in building bony matrix for osteoblastic activity."[1]

Meat constitutes one of the most important sources of protein in the nutrition of the aged. Meat offers biologically effective protein—effective in the maintenance as well as the reconstruction of wasted or damaged tissue. Its natural content of B vitamins and of essential minerals not only helps to supply the daily needs for these nutrients, but is necessary for the proper utilization of amino acids.[2]

The appealing taste of meat, its appetite-stimulating quality, and its almost complete digestibility also are important in geriatric nutrition.

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1. Rechtman, A. M., and Yarrow, M. W.: Osteoporosis, Am. Pract. & Digest Treat. 5:691 (Sept.) 1954.
2. Cannon, P. R.; Frazier, L. E., and Hughes, R. H.: Factors Influencing Amino Acid Utilization in Tissue Protein Synthesis, in Symposium on Protein Metabolism, New York, The National Vitamin Foundation, Inc., 1954, pp. 55-90.

The nutritional statements made in this advertisement have been reviewed and found consistent with current medical opinion by the Council on Foods and Nutrition of the American Medical Association.

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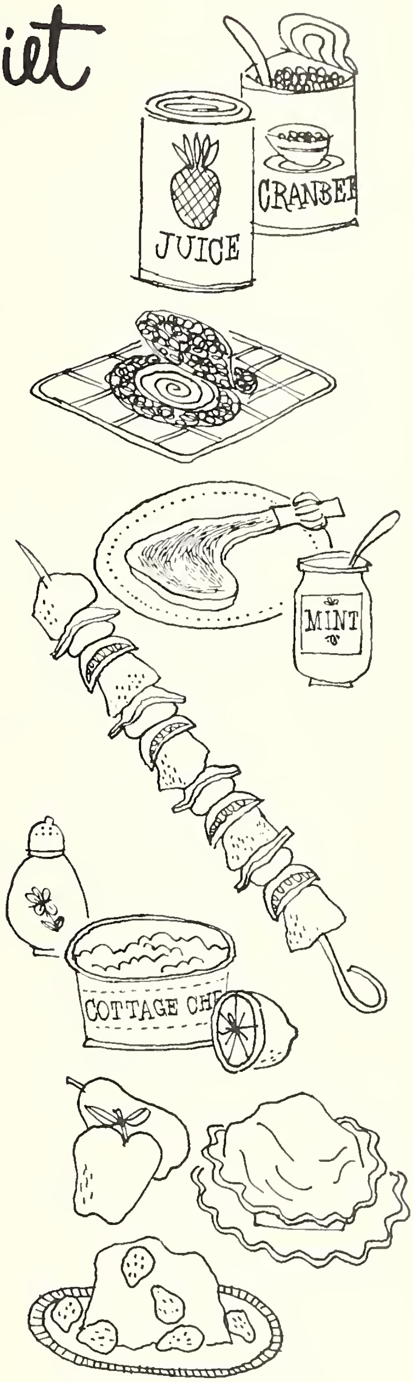

Palatability is the key to planning this diet. And these flavor tips will help you keep in the "taste appeal" your patient must have and still keep out the rich foods he cannot have.

These are for flavor—

Cranberry and tomato sauce pinch-hit for gravy. Fruit juices are to baste with as well as to drink. And herbs and spices lend a fine aroma to meats and vegetables.

Here's where they go—

Meat loaf can sport a gay cap of whole-cranberry sauce, while hamburgers make a surprise party when a slice of pickle or onion is sealed between two thin patties. Your patient can baste chicken with lemon or orange juice—glaze lamb chops with mint jelly. Lean meats, broiled or baked, are made savory with herbs. And barbecued kabobs add something different.

Most vegetables can be dressed simply with lemon juice or an herb vinegar. And tomato halves come out from under the broiler bubbly with brown sugar and sweet basil on top.

On green salads, cottage cheese thinned with lemon juice, sparked with paprika, makes the dressing. And on fruits, try lemon juice, honey and chopped mint.

For dessert, angel cake or meringue shells go nicely under fruits—skim milk powder makes the "whipped cream." Snow pudding is a simple dessert—fresh fruit, even more so. And for a change, your patient may like his fruit baked in grape or cranberry juice.

The diet, of course, will be balanced nutritionally at a suitable calorie level. And these "diet do's" will help keep your patient happy within the limits you set for his diet.

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5834 Bermuda Road, St. Louis 21

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MEDICAL ADVISORY COUNCIL

Donald M. Dowell, M.D.
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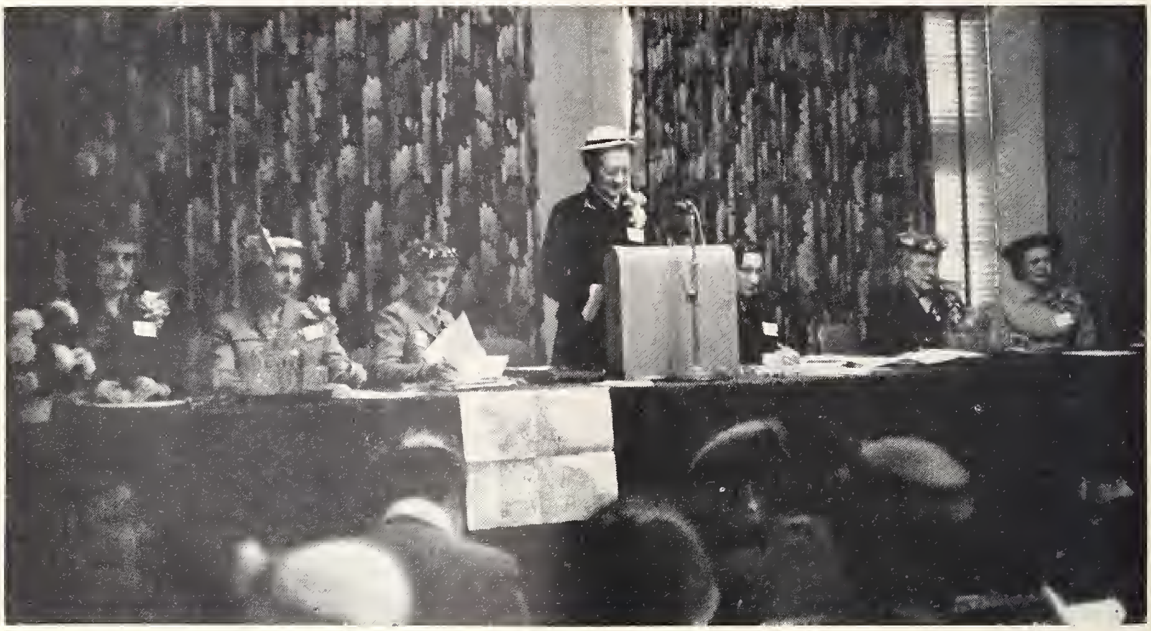
Raymond O. Muether, M.D.
19 Country Life Acres, St. Louis 24

Richard H. Kiene, M.D.
5835 High Drive, Kansas City



At business meeting on March 28 at Hotel President. From left, Mrs. Frank B. Leitz, Mrs. Charles Shepherd, Mrs. Herbert L. Mantz, Mrs. W. E. Martin, Mrs. Victor B. Buhler, Mrs. George Turner (President, Auxiliary of American Medical Association), Mrs. Jordan Kelling.

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 52 July, 1955 Number 7

Minutes of the House of Delegates

Ninety-Seventh Annual Session
Kansas City
March 27, 28, 29, 30, 1955

Sunday Session

The first meeting of the House of Delegates of the Ninety-seventh Annual Session of the Missouri State Medical Association was called to order at 1:30 p. m., March 27, in the Junior Ball Room, Hotel President, Kansas City, with Joseph L. Fisher, M.D., St. Joseph, Vice Speaker, presiding.

Officers, Councilors and Delegates present during the Annual Session follow:

Officers

President	H. E. Petersen, St. Joseph
President-Elect	Victor B. Buhler, Kansas City
Secretary	E. Royse Bohrer, Jefferson City
Treasurer	Carl F. Vohs, St. Louis
Vice President	R. Lee Hoffmann, Kansas City
Vice President	B. L. Murphy, Hannibal
Vice President	E. C. Ernst, St. Louis

Councilors

1st District	Donald M. Dowell, Chillicothe
2nd District	W. F. Francka, Hannibal
3rd District	R. O. Muether, St. Louis
4th District	Otto W. Koch, Clayton
5th District	J. Loren Washburn, Versailles
6th District	C. G. Stauffacher, Sedalia
7th District	Richard H. Kiene, Kansas City
8th District	W. S. Sewell, Springfield
9th District	J. H. Summers, Lebanon
10th District	Ben M. Bull, Ironton

Delegates
First District

Andrew	Forrest C. Long, Savannah
Buchanan	Robert B. Bristow, St. Joseph
Buchanan	Joseph L. Fisher, St. Joseph
Clay	Robert H. Parker, North Kansas City
Clinton	John P. Mabrey, Plattsburg
Grand River	
Caldwell	Frank R. Daley, Hamilton
Livingston	Joseph A. Conrad, Chillicothe
Carroll	Erroll W. Allen, Carrollton
Grundy	Charles H. Cullers, Trenton
Daviess	Edward E. Nixon, Gallatin
Harrison	W. A. Broyles, Bethany
Linn	John R. Dixon, Brookfield
Mercer	A. S. Bristow, Princeton
DeKalb	Glenn D. Johnson, Maysville
Nodaway-Atchison-Gentry-Worth	Elvin D. Imes, Maryville
Nodaway-Atchison-Gentry-Worth	Frank B. Matteson, Grant City

Second District

Chariton-Macon-Monroe-Randolph	George W. Hawkins, Salisbury
Chariton-Macon-Monroe-Randolph	Donald E. Eggleston, Macon
Chariton-Macon-Monroe-Randolph	Philip V. Dreyer, Huntsville
Lewis-Clark-Scotland	P. W. Jennings, Canton
Marion-Ralls-Shelby	Bernard L. Murphy, Hannibal
Marion-Ralls-Shelby	T. J. Hoerchler, Shelbina
Pike	Charles H. Lewellen, Louisiana

Third District

St. Louis City	Daniel L. Sexton, St. Louis
St. Louis City	Louis H. Kohler, St. Louis
St. Louis City	Alfred F. Sudholt, Jr., St. Louis
St. Louis City	Paul F. Max, St. Louis
St. Louis City	Robert B. Bassett, St. Louis
St. Louis City	Robert W. Kelley, St. Louis
St. Louis City	Jerome I. Simon, St. Louis
St. Louis City	Joseph C. Peden, St. Louis
St. Louis City	Don C. Weir, St. Louis
St. Louis City	Herbert C. Wiegand, St. Louis
St. Louis City	A. J. Signorelli, St. Louis
St. Louis City	Duff S. Allen, St. Louis

President Petersen and Councilor Kiene talk with the Rev. Richard H. Trelease, D.D., who gave the invocation.

St. Louis City	Willard Bartlett, St. Louis
St. Louis City	Curtis H. Lohr, St. Louis
St. Louis City	Sam J. Merenda, St. Louis
St. Louis City	A. N. Arneson, St. Louis
St. Louis City	Walter Baumgarten, Jr., St. Louis
St. Louis City	Paul C. Schnoebelen, St. Louis
St. Louis City	Arthur W. Neilson, St. Louis
St. Louis City	Benjamin H. Charles, St. Louis
St. Louis City	Arthur R. Dalton, St. Louis
St. Louis City	David N. Kerr, St. Louis
St. Louis City	Joseph C. Edwards, St. Louis
St. Louis City	Bruce Kenamore, St. Louis
St. Louis City	Eugene M. Bricker, St. Louis
St. Louis City	Charles R. Doyle, St. Louis
St. Louis City	Henry C. Allen, St. Louis

Fourth District

Franklin-Gasconade-Warren	Michael S. Wepprich, Washington
Franklin-Gasconade-Warren	Robert M. Keller, Owensville
Franklin-Gasconade-Warren	Harold F. Hoelscher, Warrenton
Lincoln-St. Charles	Joseph C. Creech, Troy
Lincoln-St. Charles	Herbert C. McMurray, Wentzville
St. Louis County	Louis F. Howe, St. Louis
St. Louis County	Martyn Schattyn, St. Louis
St. Louis County	Paul R. Whitener, St. Louis
St. Louis County	Lois Wyatt, Kirkwood
St. Louis County	James R. Meador, Clayton
St. Louis County	Oscar P. Hampton, Jr., St. Louis
St. Louis County	William H. Bailey, St. Louis

Fifth District

Audrain	Thomas L. Dwyer, Mexico
Boone	A. R. McComas, Sturgeon
Boone	James C. Cope, Columbia
Callaway	Henry Durst, Fulton
Cole	Joseph S. Summers, Jr., Jefferson City
Cooper	Byron M. Stuart, Boonville
Howard	W. A. Bloom, Fayette
Miller	W. L. Allee, Eldon
Moniteau	Edgar A. Kibbe, California
Montgomery	E. J. T. Andersen, Montgomery City
Morgan	Robert R. Lyle, Versailles

Sixth District

Benton	David H. Glenn, Warsaw
Henry	George S. Walker, Clinton
Johnson	Charles M. Lederer, Warrensburg
Saline	George A. Aiken, Marshall
West Central	
Bates	Arthur L. Hansen, Butler
Cedar	Robert L. Magee, Eldorado Springs
St. Clair	R. A. Slickman, Appleton City
Vernon	C. Braxton Davis, Nevada

Seventh District

Jackson	William W. Gist, Kansas City
Jackson	Donald F. Coburn, Kansas City
Jackson	Dillard M. Eubank, Raytown
Jackson	Edward H. Klein, Kansas City
Jackson	John A. Growdon, Kansas City
Jackson	Blaine Z. Hibbard, Kansas City
Jackson	R. Lee Hoffmann, Kansas City
Jackson	James A. Jarvis, Kansas City
Jackson	Frank B. Leitz, Kansas City
Jackson	Gerald L. Miller, Kansas City
Jackson	William C. Mixson, Kansas City
Jackson	Stoughton F. White, Kansas City
Jackson	Joseph C. Williams, Jr., Kansas City
Jackson	William R. Eubank, Kansas City
Jackson	Frank H. Hodgson, Kansas City

Delegates were registered prior to the Sunday afternoon session.

Eighth District

Dallas-Hickory-Polk	Evelyn Griffin, Buffalo
Greene	Walter W. Tillman, Springfield
Greene	Charles E. Lockhart, Springfield
Greene	John P. Ferguson, Springfield
Jasper	B. E. DeTar, Sr., Joplin
Jasper	Charles H. Isbell, Carthage
Ozarks	
Barry	Mary J. Newman, Cassville
Lawrence	A. J. C. McCallum, Aurora
Stone	Fred L. Wommack, Crane
Taney	Jesse M. Threadgill, Forsyth
Newton	Melvin C. Bowman, Neosho
Webster	Thomas M. Macdonnell, Marshfield

Ninth District

Laclede	H. W. Carrington, Lebanon
Phelps-Crawford-Dent-Pulaski-Maries	Robert E. Breuer, Rolla
Phelps-Crawford-Dent-Pulaski-Maries	Francis L. Kozal, Belle
South Central	
Howell	Rollin H. Smith, West Plains
Oregon	Claude W. Cooper, Thayer
Texas	Thomas J. Burns, Houston

Tenth District

Cape Girardeau	Harold Rapp, Cape Girardeau
Dunklin	Paul Baldwin, Kennett
Mineral Area St. Francois	Harry M. Roebber, Bonne Terre
Semo	
Scott	W. O. Finney, Chaffee

The Reverend Richard H. Trelease, D.D., St. Paul's Episcopal Church, Kansas City, delivered the invocation.

Mr. T. R. O'Brien read the roll of delegates and alternates, which showed a quorum present.

Richard H. Kiene, M.D., Kansas City, reported briefly for the General Committee on Arrangements.

SPEAKER: The next order of business is the reading of the minutes of the previous meeting. They were published in the July 1954 issue of MISSOURI MEDICINE. What is your pleasure?

Upon motion, duly seconded, the minutes were approved as published.

The Speaker appointed the following Reference Committees and gave the time and room number for the meeting of each committee:

Reference Committee on Amendments to the Constitution and By-laws

Gerald L. Miller, M.D., Kansas City, Chairman.
W. W. Tillman, Jr., M.D., Springfield.
Byron M. Stuart, M.D., Boonville.

Reference Committee on Resolutions

Louis H. Kohler, M.D., St. Louis, Chairman.
John P. Ferguson, M.D., Springfield.
Frank B. Leitz, M.D., Kansas City.

Reference Committee on Miscellaneous Affairs

H. B. Rapp, M.D., Cape Girardeau, Chairman.
Philip V. Dreyer, M.D., Huntsville.
Louis F. Howe, M.D., St. Louis County.

Reference Committee on Medical Education and Public Welfare

W. A. Broyles, M.D., Bethany, Chairman.
Rollin H. Smith, M.D., West Plains.
A. N. Arneson, M.D., St. Louis.

Reference Committee on Reports of Officers

Joseph C. Peden, M.D., St. Louis, Chairman.
Joseph C. Williams, M.D., Kansas City.
Paul Baldwin, M.D., Kennett.

Reference Committee on Scientific Exhibits

E. W. Allen, M.D., Carrollton, Chairman.
J. P. Mabrey, M.D., Platte City.
Joseph S. Summers, Jr., M.D., Jefferson City.

Reference Committee on Technical Exhibits

C. H. Lewellen, M.D., Louisiana, Chairman.
Mary Jane Newman, M.D., Cassville.
H. F. Hoelscher, M.D., Warrenton.

Parliamentarian

Mr. John W. Noble, Kennett, and Mr. T. R. O'Brien, St. Louis.

Delegates visited before assembling.

H. E. Petersen, M.D., St. Joseph, gave the President's Message as follows:

PRESIDENT'S MESSAGE

Mr. Speaker, Members of the House of Delegates: It is difficult for me to believe that it is just one year ago that I spoke to you as the incoming president of your Association. Here I am now to give you an account of the work done during my term of office. And I am bound to confess the actual results of the year may seem meager in relation to the very great amount of effort expended by the officers, Council, committees and staff—and, particularly, in relation to the very high expectation with which I began my presidential year.

I should confess at the outset, I believe, that I should have known better. After serving with the Council in one capacity or another for more than a decade—after seeing first-hand how complex and persistent and difficult are the problems confronting our society and the medical profession—I should have known it was not likely that Petersen's term as president would see all the answers found and all the difficulties surmounted.

I speak to you now a year older—and, I feel, many years wiser. My purpose in my brief address today is to try to convey, if I can, something of the new knowledge I have gained during the last twelve months.

I should like to start by asserting quite baldly—and even paradoxically—that the past year has been a year of impressive achievement. At the very start of the year, this House of Delegates formulated a bold new approach to one of the fundamental problems of health care in Missouri. That problem has its roots deep in the history of our state. In one single year, I believe we have come a long way toward its solution. I refer, of course, to the problem of cultism—to the basic problem of who should be licensed in the State of Missouri to care for the sick—to the problem of providing a safeguard for the people—to the problem of bringing the statutes of Missouri into line with the standards of Twentieth Century science.

Let there be no misunderstanding. We have not solved the problem as I hoped we should—as I held that hope a year ago. I have already said I am many years wiser than I was when I believed we might possibly achieve such a complete result within my term of office.

Other speakers—your new President and the Chairman of your Council—will tell you about the hard problem that still confronts us—and the steps our Association may now take toward solving it—how they propose to go about the big job ahead. My task is to conduct a postmortem. It is to make clear to you certain facts about a year that is now dead—and to try to evaluate what happened during its life.

In brief, then, I have to talk to you about a presidential year of both success and failure. The past year, in other words, has proved to be what a reasonable man would have expected in the first place. It has been a year—like any other. But the nature of its success—and the reason for its failure—seem to me worth dwelling on. They are worth attention chiefly, I believe, because we have, in this one year, succeeded more grandly—and failed more abjectly—than in any time I can remember.

First, as to our success. The year now past has seen the medical profession of this state do a thing of great importance. It has seen us take a stand on principle. It has seen us rise above narrow professional interest. It has seen us do a thing that should have been done fifty years ago. And if this Association had done it then, the people of Missouri, and their representatives in Jefferson City, would know what qualifications to demand in a doctor; cultism in this state would be dead; there would be no issue regarding chiropractic, naturopathy or any other eccentric and irresponsible approach to the care of the sick.

I cannot praise too strongly the vision of this House of Delegates and the statesmanship and energy of our Council, officers and committees. Together they brought us to this splendid position of principle. We took the position that—whatever it was practically necessary to recognize as existing in the present state of things, we were nevertheless determined to set a standard for the future that would give all the people of Missouri assurance that newly licensed doctors would measure up to a minimum standard of competence—a standard acceptable in the light of the medical science of our time.

To come out for this principle, to accept the immediate compromise for the long-term goal, took courage on the part of the men who proposed it and on the part of the delegates who accepted it. It was a new and difficult concept for many members of our profession. It was the difficult business of giving priority to a solution that would be right in the long run over considerations of great force and influence in the short run. Last year was a year to be proud of the medical profession. We took a formal stand for the right thing—and we took it without a single dissenting vote in this House of Delegates.

But honesty compels me to say at the same time that the year was also a time to be a little ashamed of the medical profession. We took our stand. We went through the motions of presenting our fundamental solution to a fundamental problem of health care in Missouri. But we did not—as a profession or an Association—have enough fighting enthusiasm for our project to make any impact whatever on the people of the state or upon their representatives in the General Assembly.

The consequence is we have lost a battle. Our proposed legislation, Senate Bill 226, is dead in committee. I do not think its merits were ever seriously considered by the members of the Legislature. Still worse, I do not think the import of the measure was ever adequately considered even by individual members of the medical profession, who demanded of the Council of MSMA that something of the sort be done, who ratified the principle through this House of Delegates, who approved the measure in county society meetings, and who expressed negligible reservations when invited to comment by mail from the Association office.

The plain fact is that the proposal defined and acquiesced in by the intelligence of the medical profession had very little support from doctors' emotion and enthusiasm. We were like a child who submits to a necessary, but disagreeable medicine. We knew we ought to take it, but all too few of us were mature enough to work up any enthusiasm for the cure the bitter stuff was aimed at.

The result probably could have been foretold. The chiropractors, the quacks and the lunatic fringe closed ranks in a hurry. Members of the General Assembly received many, many thousands of letters against our bill. They got very few letters from doctors favoring the measure. (Indeed, they got a number of indications from particular doctors saying it would be fine if they killed the bill, the bill that had been defined and drafted after so many months of effort and discussion by MSMA itself.)

I repeat, we have lost a battle. We lost it in large measure because we did not have the will to win it. We lost because, in some degree, there were members of what should have been a united army who defected from the cause.

The loss of the last year, however, seems to me very small when measured against the progress we have made in coming to grips with a fundamental problem and in formulating a fundamental solution for it. The medical profession of Missouri has come out for a principle that is sound and true. Nobody knows better than I—after the experience of the past year—that there is a great gulf between the formulating of a principle and the fighting for it and success in establishing it in the law of the state. I recognize that it is only reasonable to expect that things of the magnitude of this one will take time and patience for their realization.

My plea to each of you today is to give a greater measure of support to your Council in the year ahead—to do your best to understand the difficulties of the choices that have to be made—to close ranks and fight for the thing that next time will be the settled policy of our association—to do everything you can to make the Legislature and the people—and above all the rank and file of the medical profession—understand how great is their stake in getting an acceptable legal answer to the very great and very real problem in Missouri: What is a doctor? It's a question the people have a right to get answered and get answered responsibly by the government of their state.

I have also a word to say to the Council, the officers and staff of our Association. Whatever precise steps they formulate in the months ahead to bring us to the goal we have set for ourselves—I think it is of the greatest importance that the most intense possible effort be made to get the proposal fully understood and fully accepted by the profession. I recognize the difficulty in finding an answer that is politically possible on the one hand and universally acceptable to doctors on the other. I recognize that there are almost certainly bound to be minority views. I urge that these views be respected, and that the men who hold them be given the fullest opportunity to be heard. But then—finally, after the discussion and the debate are done—I hope this Association will come before the people and the legislature of this state with a higher degree of unity and enthusiasm and devotion to the cause than we showed in the year now past.

I hope we shall stand strongly together. I hope we shall do so effective a job of education and persuasion as will make the principle we are fighting for prevail. I hope I have now expressed with sufficient emphasis my conviction that, though we have lost a battle, we are, with good will and hard work, going to win the war.

I have talked at, perhaps, too great length about a major element of our past year's program, about one dramatic aspect of what MSMA has been seeking to do for the people of Missouri. I cannot close my remarks without saying that hundreds of members of this Association throughout the year gave, to a degree greater than I have ever seen before, their time and their work to carrying out a broad and impressive general program of service to the people and the profession of the state.

It is customary, I know, for the retiring President to discuss in some detail the major work of certain committees. To do so now would take unduly long. The reports are printed in your booklet and will come before you in the regular way.

I wish to say only that the men of our committees deserve your thanks and your congratulations on a year of excellent work in every area that touches on the health problems of this state—and the problems are many and complex. In the year now past we have made our continuing contribution to life in Missouri. To each man who helped with the job I express my thanks.

It has been a challenge and an inspiration to serve as your President. To my successor I extend the wish that his term of office may see the realization of much we have long hoped to accomplish—toward the accomplishment of which we made progress—great progress—together last year.

Thank you.

The Speaker referred the President's Message to the Reference Committee on Reports of Officers.

Victor B. Buhler, M.D., Kansas City, gave the Recommendations of the President-Elect as follows:

RECOMMENDATIONS OF THE PRESIDENT-ELECT

Mr. Speaker, Members of the House of Delegates: The talk I have to make to you today is going to be brief—and for the best possible reason. What I have to say is, I think, important. I want to get it across. I know your attention is going to be taken up by many, many thousands of words before this session is finished. I know you are going to get tired of words. It's my hope that by saying as few words as possible, I shall succeed in fixing your attention on—and confirming your assent to—one basic principle.

It is customary for an incoming President of the Association to present in some detail to the House of Delegates on this occasion the elements of the program he intends the Association will carry forward in the coming year. It is not my intention to be so specific. I shall not begin to tell you in concrete terms what I expect will be accomplished by our organization in the next twelve months.

The complexities of the problems that confront us are many. The detailed considerations touching each problem are complex. I do not claim in any sense to have a program for the guidance of the Committee on Rural Medical Service, the Committee on Medical Economics, the Committee on Mental Health, and all the others. (Indeed, it is my experience that our good programs and good ideas get started by the original thinking and hard work of the men on our committees themselves.) I do not claim to have a blueprinted program of particular objectives to recommend to this House of Delegates or to advocate as a master plan for the year to the Council.

I come to the presidency of your Association with a very deep sense of the difficulty and the challenge of the task before me. I come with a sense of humility as regards my ability to help us find particular answers for particular problems.

But I do stand before you today convinced of and committed to a basic principle. And I wish, above everything, that the particular things that will be done next year may have a central and unifying connection with this principle. And I pledge to you my best efforts to apply this principle to all the many and separate problems that we shall have to contend with in the months ahead.

The principle I am talking about may be stated simply. It is the principle that provision of health care—the diagnosis and treatment of the sick—is at root the responsibility of the individual professional man. In everything our Association does I believe it of paramount importance to maintain this principle of the responsibility of the individual physician. Whatever trends there may be toward bringing other persons and agencies of society—technical people, hospitals, clinics, groups, corporations, insurance plans or whatever—into effective teamwork with the medical man to provide more broad and more effective health care, we may not, if we are to be true to ourselves and to our responsbility, allow any of these to institutionalize the practice of the physician or to come between him and the individual human beings it is his responsibility to care for.

There is a social aspect, an organizational aspect and a technical aspect to the provision of good and complete medical care today—but none of these aspects of the job should be permitted to overshadow the very root of the whole matter—which is the individual physician's bringing his professional knowledge and skill to bear on the care of the individual patient.

The principle, then, that I wish to see this Association stand for in all its activities in the coming year is the principle that we must safeguard the identity and uphold the responsibility of the individual physician.

One question in particular is before us that relates fundamentally to this principle. It is the question of who is to practice medicine. It does not seem on the face of it to be a particularly significant question. It's one to which I think an ordinary person would answer without much thinking. Who is to practice medicine? Why a doctor of medicine, of course. Who else?

And yet, as I have observed our problems as a member and later as Chairman of the Council, I have found that nearly all our important problems run back to the fact there is the widest uncertainty at the present time in our state—and not only in our state but in our nation and our society—as to the precise definition of the practice of medicine and of the practitioner of medicine. Until American society develops a straight and clear understanding on this point, our problems in all their detailed implications are going to get more and more confused, and their solutions are going to get more and more difficult.

Delegates assembled at Hotel President for the Sunday session.

The problem we have tried to solve regarding the licensure of physicians in Missouri will immediately come to your mind. Our experience of the last year has shown that, even on this fundamental point as to the standard that should be set for future licensees, there is a wide difference of view among the citizens of our state, among their legislators and, indeed, among some doctors of medicine themselves.

What is a doctor? What ought he be required to know? What compromise can we afford to make with facts as they are—social facts, political facts—to get a right and practical answer to this question at its very source—at the point at which the State of Missouri licenses men to care for the sick?

Here, I merely ask the question. It's a question our Association will need again to try to find an answer for in the coming year.

Another question. Where do we find a dividing line between the appropriate function of the doctor of medicine and the permissible work of employed technicians? Where does the function of the hospital, the corporation, the employer of technicians stop—and where does the proper function of the professional doctor of medicine begin?

Is it inevitable—as hospitals, Blue Cross and Blue Shield, other insurance programs, welfare undertakings and various other public or private enterprises get deeper and deeper into the business of providing health care—is it inevitable that we shall have to redefine our thinking about the practice of medicine and agree to let major parts of it become simply commodities and services provided by corporations and public agencies which buy and sell the skills of doctors as the demands of their business require.

There is evidence on many sides of a trend in this dangerous direction. There is the gravest need for the reassertion of the principle that the practice of medicine—the care of the sick—is the business of the individual physician. There is need to strive for wider and clearer understanding that to neglect this principle is to incur a grave danger to the whole spirit of individual responsibility that, through the generations, has pervaded the medical profession—the spirit that has made the record of the profession in the United States the splendid thing it is today.

And so, in summing up, I should like to call on every officer, every committee chairman, and member and every individual doctor of this Association to do his part in the year ahead to make our program reflect the great principle I have spoken of. In all our work with public agencies, in all our work to help solve economic problems attendant on the provision of medical care, in all our cooperation with public or private institutions of every sort, in all our policy thinking on the troublesome problem of licensure—in all we do in the coming year, let us maintain and strengthen the central principle that underlies the calling of the physician. And in all we do, as a society and as individuals, let us try to be worthy of that calling.

I thank you for the honor you have done me in naming me your President. I shall try to be worthy of that honor.

The Speaker referred the Recommendations of the President-Elect to the Reference Committee on Reports of Officers.

The report of the Secretary, E. Royse Bohrer, M.D., Jefferson City, follows:

REPORT OF THE SECRETARY

On December 31, 1954, the official membership of the Association was as follows:

Status of Membership

Number of Members, January 1, 1954	3,629
New Members	211
Members Reinstated	2
Total	3,842
Members Dropped	31
Members Deceased	80
Members Transferred	45
Members Resigned	14
Number of Members, December 31, 1954	3,672

The Committee on Nominations, which is appointed by the President from the House of Delegates, must submit nominations for the following officers:

Three Vice Presidents to fill the expired terms of B. L. Murphy, M.D., Hannibal; R. Lee Hoffmann, M.D., Kansas City, and E. C. Ernst, M.D., St. Louis.

Two Delegates and corresponding Alternates to the American Medical Association to fill the vacancies created by the expiration on December 31, 1955, of the terms of F. L. Feierabend, M.D., Kansas City, Alternate, Rolla B. Wray, M.D., Nevada; and Joseph C. Peden, M.D., St. Louis, Alternate, Walter Baumgarten, M.D., St. Louis.

The terms (two years) of the Councilors of the even numbered districts expire this year: W. F. Francka, M.D., Hannibal, Second District; Otto W. Koch, M.D., Clayton, Fourth District; G. C. Stauffacher, M.D., Sedalia, Sixth District; W. S. Sewell, M.D., Springfield, Eighth District; Ben M. Bull, M.D., Ironton, Tenth District. Delegates from these districts shall meet prior to the last day of the meeting and elect the Councilor for their District. The election shall be certified to the House of Delegates on a prescribed form which will be furnished. Lists of Delegates from the various districts will be available to the Councilors and may be checked for those present at the Session at the Registration Desk.

The Annual Session will meet for four days, beginning Sunday, March 27, at 1:30 p.m., with a session of the House of Delegates, and closing Wednesday afternoon with a final session of the House. The House will also meet on Monday, March 28, at 4:00 p.m. The first session of the House will meet in the Junior Ballroom of Hotel President, the Monday and Wednesday sessions in the Little Theater of the Auditorium. Registration for Delegates only will be open in the hotel on Sunday.

The Annual Banquet in Honor of Past Presidents will be held on Tuesday evening, March 29, at 7:30 p.m., at the President Hotel. Elmer Hess, M.D., Erie, Pennsylvania, President-elect of the American Medical Association, will speak on "What's Right With Medicine."

E. ROYSE BOHRER, Secretary.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Executive Secretary, Mr. T. R. O'Brien, follows:

REPORT OF THE EXECUTIVE SECRETARY

The year 1954, if not the busiest, was certainly one of hard work for officers, councilors and committees of the Association. It seems that the problems of the medical profession become more complex with the passage of time. Nevertheless, the members who have participated have given freely and cheerfully of their time to provide guidance and help to the executive office staff. My hat is off to all of them and I sincerely appreciate their help.

The Delegates were attentive.

The executive office staff members are more than interested in your problems and are a continuing source of inspiration and help. Thanks are due to each of them, Ray McIntyre, Helen Penn, Mrs. Bertha Thomas, Mrs. Gloria Luecke, Mrs. Marguerite Harris and Donna Barth.

The reports of the Council, standing and special committees contained in the "Reports" give a good idea of the work during 1954. Special activities carried out are reflected in these reports.

All Committee and Council meetings are attended and instructions from these bodies are carried out by myself and the office staff.

We shall do our best to carry out the wishes of the Association during this present year.

T. R. O'BRIEN.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Treasurer, Carl F. Vohs, M.D., St. Louis, follows:

REPORT OF THE TREASURER

The report of the Treasurer is covered in the Financial Statement of the Association for 1954 which appeared in the March issue of Missouri Medicine. Since Delegates have had that issue of the Journal of the Missouri State Medical Association, the report is not repeated in these reports.

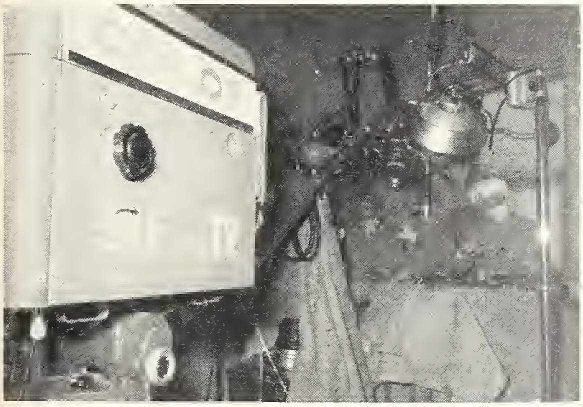
Carl F. Vohs, Treasurer.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on Scientific and Postgraduate Work, Maxwell G. Berry, M.D., Kansas City, Chairman, follows:

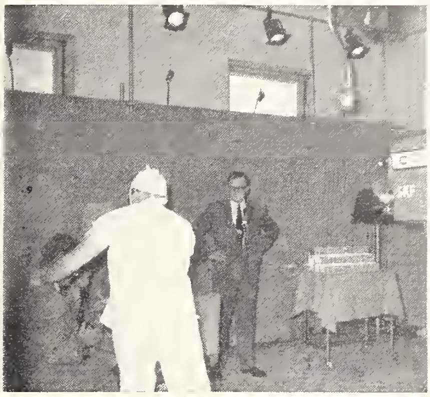
REPORT OF THE COMMITTEE ON SCIENTIFIC AND POSTGRADUATE WORK

This Committee is pleased with the number and quality of postgraduate and refresher courses which are being made available, over the state, through regular meetings of County Medical Societies, through medical schools' postgraduate departments, through Missouri Academy of General Practice sponsored programs, through various clinical conferences such as the Kansas City Southwest Clinics, the Clay County Medical Society Annual Clinical Conference, the Southeast Missouri Cancer Conference and the St. Joseph Clinical Society programs, through the two day scientific program of the annual meeting of the Missouri Academy of General Practice, through the three day scientific program of the MSMA Annual Session, through the workshop on cardiology of the Missouri Heart Association, through Councilor District programs and through joint County Medical Society meetings. It is recognized that some of the programs leave something to be desired, however in the main, the programs have been diversified, practical and reasonably well presented.



Television from Kansas City General Hospital was a vital part of the program.

The Committee would suggest that program committees of County Medical Societies, in arranging their programs, plan them as far in advance as possible. Each meeting program for the next six months or for the entire year may well be placed in the hands of the members before the first meeting of the series. This procedure has a number of advantages: It is easier to get speakers when they are contacted far ahead of a scheduled date, it offers a better means of coordinating the programs, and it helps the members to plan ahead so that they may be sure of attending certain sessions of special interest. The Committee further suggests that program committees explore the feasibility of more panel type programs of a discussion nature without formal talks by panel members.



A patient is placed in position to be televised.

The Committee has observed with interest and satisfaction the increased activity and interest on the part of many physicians in rural Missouri in their local medical societies as a result of the various hyphenations. This forward step toward activation of small societies is continuing with Newton and McDonald counties recently added to the Ozarks Medical Society group and Laclede County to the Phelps-Crawford-Dent-Pulaski-Maries hyphenation. There are similiar projects under consideration at the present time, in other areas of the state.

During the last year, a fine cooperative relationship for furnishing and sponsoring scientific programs for various medical society meetings has been maintained between our Committee and the Education Committee of the Missouri Academy of General Practice. Duplications and conflicts in meetings and programs have been eliminated through this working together. Other organizations such as the Missouri Heart Association have worked with our Committee in scheduling their meetings so that conflicts might be prevented. In this respect, we are serving as somewhat of a clearing house for the scheduling of larger, irregular medical meetings.

The Committee takes this opportunity to express its thanks and appreciation to all of those physicians who have appeared on the many scientific postgraduate programs held over the state.

The Committee has arranged the program for the 1955 Annual which it believes is also postgraduate work and will enable the members of the Association to obtain an intensive, three day, postgraduate course. Thirteen presentations will be made by speakers, all of whom have been chosen for their ability, not only in their field, but in presenting material in a practical manner. Color television on a large screen will be used, considered by many the most efficient means of teaching available at the present time. Telecasts will be made from Kansas City General Hospital and viewed on the large screen in the Little Theater of the Auditorium.

Maxwell G. Berry, Chairman,
Alphonse McMahon,
Roy W. Pearse, Jr.,
M. Pinson Neal,
William P. Maddux,
Michael S. Wepprich.

Chester L. Clark,
Allen I. Herman,
Charles P. Wilson,
Peter V. Siegel,
Carroll P. Hungate,
Eugene M. Bricker,
Charles E. Martin.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Publication, Vincent T. Williams, M.D., Chairman, follows:

REPORT OF THE COMMITTEE ON PUBLICATION

January 1, 1954, to December 31, 1954

The 51st volume of Missouri Medicine was completed with the December 1954 issue. During 1954 there were published fifty-eight scientific articles, nine postgraduate reviews, eleven case reports, twenty-four special articles, forty-four editorials, eleven "Fraternally Yours," eleven listings of meetings, eleven reports of the Field Secretary, five hundred fifty-nine news items, ninety obituaries, two hundred new members, one hundred four county society and Councilor District reports, eight "Rx: Common Sense," ten "News of Medical Schools," ten "Pettis County Pot Pourri," thirty-two miscellaneous articles, twelve articles on organization activity, fifteen letters, one roster, thirty-four book reviews, eleven "Curiosa et Trivia," eleven guest editorials, ten Missouri Academy of General Practice articles, eleven "Crossroads Comment," ten hobby articles, ten columns "Capsule Clinics," eleven articles on the Woman's Auxiliary, eleven "Missouri Medicine in Review," two articles on prepayment plans, eleven "President's Comments," eight columns on "Others Say," three articles from the Division of Health. There were 656 reading pages, 392 pages of advertising and 68 pages of advertising inserts, totalling 460 advertising pages, and 1048 total pages.

Advertising in Missouri Medicine from January 1, 1954, to December 31, 1954, earned $24,092.12. Subscriptions of nonmembers amounted to $209.90, making $24,302.02 earned by the publication. The cost of production (printing and illustrations) was $23,537.59.

Vincent T. Williams, Chairman,
R. O. Muether,
Paul O. Hagemann,
M. D. Overholser,
John P. Ferguson.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Defense, C. E. Hyndman, M.D., St. Louis, follows:

REPORT OF THE COMMITTEE ON DEFENSE

April 1, 1954, to March 15, 1955

Cases pending, April 1, 1954	3
New cases during the year	0
Cases settled during the year	0
Cases pending, March 15, 1955	3

C. E. Hyndman, Chairman,
James H. O'Neil,
Roland S. Kieffer,
O. B. Zeinert,
L. P. Forgrave.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Public Policy and Public Relations, Jerome I. Simon, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON PUBLIC POLICY AND PUBLIC RELATIONS

During the year the Committee, through its Chairman, has maintained close contact with the officers and the Council of the Association and has made recommendations as to the public relations aspects of policy problems, particularly in regard to the single license legislation now pending before the General Assembly.

A meeting was held on October 10, 1954, in Jefferson City for the purpose of presenting to the members of the Committee all the considerations of policy related to the public disclosure, introduction and support of the single license legislative measure sponsored by the Association. After deliberation, the Committee recommended to the Council a course of action which was, in general, followed.

The Committee on Public Relations held several meetings during the year.

The wisdom of enlarging the membership of the Committee to provide for a representative of each councilor district was demonstrated during the year. Every step of the program for making public and supporting the single license measure was cleared with the Committee by letter, and individual members of the Committee performed important services in clarifying the contents of the measure within the profession and with legislators and the general public in particular councilor districts.

The mechanics of public relations and communication work continued to be handled by our agency under the day-to-day direction of the Executive Secretary of the Association.

Jerome I. Simon, Chairman,
T. E. Potter,
T. J. Hoerchler,
Russell J. Crider,
J. W. Allee,
Rolla B. Wray,
Victor B. Buhler,
Ralph Perry,
O. B. Crawford,
H. W. Carrington,
D. Rusby Seabaugh,
H. E. Petersen,
W. F. Francka.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Cancer, E. C. Ernst, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON CANCER

The Cancer Committee is not unmindful of the good work accomplished in the past several years by the medical profession, the Missouri volunteer workers of the American Cancer Society, and the Public Health in their efforts to acquaint the public with the early signs and symptoms of cancer, and the advantages of periodic medical examinations. In addition to these state-wide lay educational cancer service activities of publicizing the seven danger signs and symptoms of this disease, the Committee previously suggested a new type of cooperative venture, which would more closely personalize the patient-physician relationship, the eventual goal being to discover cancer more frequently at a time when treatment procedures can be applied most effectively.

The Committee suggested the desirability of adopting such a new cancer service program in a previous Committee report. In the meantime, investigations were undertaken to evaluate the procedures adopted in other states for making "every doctor's office (with limited reservations), a cancer detection center." All phases of this cancer service program were discussed at a recent meeting held in Columbia at the Ellis Fischel State Cancer Hospital by the members of the Cancer Committee and it was agreed by those present to implement such a program in Missouri under sponsorship of the Missouri State Medical Association, American Cancer Society and the Division of Health. The initial objectives would be to stimulate greater interest in such a mutual venture whereby the patient and his or her local physician, either individually or collectively, would take the initiative in their cooperative efforts to exclude evidence of early cancer.

Notwithstanding the accomplishments of past cancer service programs, educating the public as to the seven danger signals, perhaps the anticipated favorable response or attempts at early detection of cancer on a local-rural level has not kept pace with the advances made in the surgical and radiologic management of this disease.

Suffice to state, widely diversified efforts are being developed in various directions by different methods in more than a dozen states, and all of these new service activities have for their objective the early detection of cancer by some form of decentralized diagnostic screening process by the local cancer committee of the county medical society, or more directly have examinations made in the doctor's office.

The different methods adopted in other states were likewise carefully analyzed as to their applicability in Missouri. Instead of employing the more complicated forms adopted in other states, it was decided to use two sides on a single sheet questionnaire form. The front page of this blank would be limited to a dozen or more practical cancer questions relating to the early signs and symptoms of cancer. These questions could be answered by the patient in a few minutes by simply scratching either "yes" or "no." Such a symptom blank could then be presented by the patient to his local physician, who, in turn, could make an appointment for the requested general physical examination.

The completeness of such an examination may depend more or less upon the extent of the laboratory or x-ray facilities available in a given community. The doctor could then record his physical findings on the opposite page of this same blank in the spaces provided under appropriate anatomic physical examination headings. The examiner could then add his recommendations or conclusions, or, if he deemed it advisable, refer the patient to a nearby medical clinic for additional diagnostic studies. On the other hand, if the situation is found to be serious, or the diagnosis questionable, he could recommend transfer to a larger special hospital for final diagnosis.

Such a printed single sheet questionnaire—one side containing the patient's answers—and the other providing sufficient space for recording the doctor's physical examination—was prepared by the Cancer Committee. The American Cancer Society has offered to assume the cost of printing and have copies available for our annual meeting in Kansas City. Ways and means of distributing these leaflets with instructions to the county medical society secretaries as to their use can be discussed with the members of the Council. The American Cancer Society probably would be willing to cooperate in such a distribution.

Preferring to follow a conservative course, the Cancer Committee throughout the last year has continued to investigate other cancer service programs, realizing that Missouri may have different problems from those found in other states in which the population is not largely concentrated in metropolitan cities. It should be mentioned that the proposed cancer service program outlined for Missouri was found to be relatively successful in a few states. In others, there was a lack of cooperation on the part of the public and the medical profession—in part this was apparently due to a lengthy, all inclusive questionnaire, which was found to be too complicated for the busy practitioners.

Another phase of this cancer service problem should be discussed. It has been brought to the attention of the Committee that there has been a lack of adequate preliminary screening of prospective cancer patients on the local-county level prior to a direct transfer of the afflicted to the more distant Ellis Fischel State Cancer Hospital, or other similar diagnostic institutions. This subject was again discussed at the recent cancer meeting and a sub-committee was appointed to study especially the transportation and economic phases of this problem. This challenge is unquestionably applicable to the free service rendered by the Ellis Fischel State Cancer Hospital in their efforts to administer more effective clinical cancer service and adequate hospitalization. Apparently there is a dual problem involved. By eliminating at least a large number of those patients referred for physical diagnostic examinations at the State Hospital, whose findings were subsequently found to be negative for cancer, the proposed screening program on the county level should prove to be worth while. If 40 per cent of these hospital applicants had been preliminarily screened by their family physician in their local community, the necessary hospital day, diagnostic and laboratory requirements in larger hospitals could be reduced.

The economic problem is likewise a factor. By eliminating a large percentage of the unnecessary transportation expense involved in transporting the indigent patient to and from distant hospitals, together with a corresponding reduction in the number of hospital days, the tax burden of the counties and state hospitals would be lessened.

It is also conceivable that the number and extent of the more radical operations for cancer, or prolonged radiation therapy procedures, could likewise be reduced if the disease had been discovered at an earlier stage. The more expensive and extensive radical type of treatment procedures would be less frequently indicated and the cure rate would be correspondingly increased. The Committee appreciates the fact that if such a program were universally adopted by everyone receiving such a questionnaire the present day available medical personnel could not hope to cope with such a situation. Knowing human nature, however, such an immediate favorable response is highly unlikely.

Edwin C. Ernst, Chairman,
E. Kip Robinson,
Joseph L. Fisher,
Marvin L. Napper,
Thomas Martin,
Jack H. Hill,
Frederick J. McCoy,
George A. Carroll,
G. L. Watkins,
C. W. Meinershagen,
A. N. Arneson.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Medical Economics, A. P. Rowlette, M.D., Moberly, Chairman, follows:

REPORT OF THE COMMITTEE ON MEDICAL ECONOMICS

The Committee met in St. Louis, April 25, 1954, and considered the following:

The Committee considered a questionnaire submitted by the Missouri State Chamber of Commerce as follows:

1. Subject small employers (with less than eight employees) to the federal unemployment compensation tax of 3 per cent of the employer's payroll, up to $3,000.00, for each employee. Under Missouri Law, such an amendment to the federal law would automatically subject these small employers to a 2.7 per cent state tax which would offset 90 per cent of the federal tax, so that these employers would pay 2.7 per cent on payrolls up to $3,000.00, for each employee to the Missouri Division of Employment Security, and .3 per cent to the federal government.

2. Permit states to grant a reduced tax rate based on experience after one year instead of the present three years.

General registration was held at the Auditorium.

This action of the Committee was considered by the Council of the M.S.M.A. at its meeting June 5, 1954, and was approved.

Though the Committee went on record as opposed to the extension of unemployment compensation to include groups of less than eight, and favor changing the experience rating period from three to one year, the federal government has since passed legislation requiring small employers, including physicians, with four or more persons to be subject to the unemployment compensation law.

Joint Billing: The A.M.A. wrote constituent associations on March 30, 1954, regarding the Principles of Medical Ethics, including a questionnaire, reading as follows:

1. Section 6 of Chapter I (pages 9 and 10) and Section 5 of Chapter VII (page 24) of the December 1953 Principles establish the Principles of Medical Ethics with respect to "receipt of remuneration for professional services" and "Commissions." The interpretation of these Principles by the Judicial Council is that it is unethical for two physicians who participate in the care of a patient to render a single bill.

2. Do the Principles of Medical Ethics of your state association differ in any significant respect in their application from Section 6 of Chapter I and Section 5 of Chapter VII of the Principles of Medical Ethics of the American Medical Association?

3. What is the policy in your state concerning billing procedures when two or more physicians participate in the care of a patient?

4. How are payments made to physicians by health insurance agencies when two or more physicians serve a patient?

The Committee agreed that the answer to No. 2 was "No"; to No. 3 "Joint billing is considered unethical"; to No. 4 "payment is made to, surgeon, no allowance is made to assistants." It was suggested that, while the Constitution of the M.S.M.A. stated that the A.M.A. Principles of Medical Ethics was that of the Association, it might be well to actually incorporate them.

This action of the Committee was considered by the Council at its meeting June 5 and was approved.

The House of Delegates of the A.M.A. considered the questionnaires at the meeting in San Francisco, June 21, 1954. The Association received answers from 40 state associations, including Missouri, and recommended that the Principles of Medical Ethics, Section 6, Chapter I, be revised as follows:

Sec. 6.—The Ethical physician, engaged in the practice of medicine, limits the sources of his income received from professional activities to services rendered the patient. Remuneration received for such services should be in the form and amount specifically announced to the patient at the time the service is rendered or in the form of a subsequent statement.

Unethical methods of inducement to refer patients are devices employed in a system of patronage and reward. They are practiced only by unethical physicians and often utilize deception and coercion. They may consist of the division of a fee collected by one physician ostensibly for services rendered by him and divided with the referring physician or physicians or of receiving the entire fee in alternate cases.

When patients are referred by one physician to another, it is unethical for either physician to offer or to receive any inducement other than the quality of professional services. Included among unethical inducements are split fees, rebates, "kickbacks," discounts, loans, favors, gifts and emoluments with or without the knowledge of the patient. Fee splitting violates the patient's trust that his physician will not exploit his dependence on him and invites physicians to place the desire for profit above the opportunity to render appropriate medical service.

Billing procedures which tend to induce physicians to split fees are unethical. Combined billing by physicians may jeopardize the doctor-patient relationship by limiting the opportunity for understanding of the financial arrangement between the patient and each physician. It may provide opportunity for excessive fees and may interfere with free choice of consultants, which is contrary to the highest standards of medical care.

This was adopted by the House of Delegates of the A.M.A.

Hospital Admissions at University of Missouri: The possibilities of the methods of payment for indigent patients in the hospital to be built in connection with the medical school at the University of Missouri was discussed, it being pointed out that of Minnesota, Iowa, Wisconsin and Michigan, in three all expenses are paid by the counties and in the fourth by the state and the county. It was pointed out that the ideal was for the county to pay all but that this may not be practical in Missouri. It was pointed out that the survey of indigent care being made by the Missouri Health Council might give some pertinent data. It was decided that the Committee should offer its services to the Board of Curators in any way possible when they have plans definite enough for discussion.

This action of the Committee was considered by the Council of the M.S.M.A. at its meeting June 5 and was approved.

Health Institutes: The matter of health institutes, sponsored principally by labor unions in the larger cities, were discussed, it being pointed out that some gave full medical care and others only check-up service. It was asked that the Committee have copies of an A.M.A. survey of such institutes but it was pointed out that this survey did not give any conclusions or recommendations. The Committee felt that this was in the province of the local county medical societies and not that of a state committee.

Other items considered by the Committee dealt with fee schedules for recipients of welfare benefits and no action was taken at the time of the meeting.

Missouri Medical Service met during the year.

Blue Cross-Blue Shield: As is customary, the Committee wishes to include in its report information about the progress of the Blue Cross-Blue Shield Plans in Missouri during the year 1954.

Missouri Medical Service (Blue Shield)

Membership, December 31, 1953	372,077
Membership, December 31, 1954	376,777
Reserve per agreement	$8.74
Reserve per participant	$3.78
Number of cases paid	70,005
Amount paid during year	$3,627,525.00

Blue Cross—St. Louis Plan

Membership, December 31, 1953	824,101
Membership, December 31, 1954	808,904
Reserve per agreement	$9.17
Reserve per participant	$3.80
Number cases hospitalized	130,011
Number days hospitalization	897,005
Average days stay per year	6.9
Amount paid during year	$11,147,665.00

Kansas City Blue Shield Surgical Medical Care

Membership, December 31, 1953	325,772
Membership, December 31, 1954	319,880
Reserve per agreement	$9.06
Reserve per participant	$4.12
Number of cases paid during year	146,569
Amount paid during year	$3,749,140.77

Kansas City Blue Cross

Membership, December 31, 1953	351,654
Membership, December 31, 1954	351,639
Reserve per agreement	$10.69
Reserve per participant	$4.86
Number of cases hospitalized	68,362
Number of days hospitalization	438,486
Average days stay per year	8.1
Amount paid during year	$6,855,007.62

A. P. Rowlette, Chairman,
Arthur B. Smith,
E. A. Stricker,
Charles R. Doyle,
E. Royse Bohrer,
J. H. Trolinger,
John R. Forgrave.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Maternal Welfare, Kenneth E. Cox, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON MATERNAL WELFARE

The Committee on Maternal Welfare met at the Missouri Hotel, Jefferson City, February 6, 1955, with Kenneth E. Cox, M.D., Kansas City, Chairman, presiding. Those present were Drs. Cox, E. E. Wadlow, St. Joseph; G. L. Miller, Kansas City; William See, Columbia; James E. Keeler, Kansas City; Helman C. Wasserman, St. Louis; Francis R. Burns, Hannibal; Joseph Krebs, St. Louis; L. M. Garner, Jefferson City; James R. Amos, Jefferson City; H. Ewing Wachter, St. Joseph; Helen Penn, St. Louis.

Dr. Cox read from the report of the Committee made in 1953, as follows: "The St. Louis and Kansas City Obstetric and Gynecologic Societies have been studying these (maternal) deaths in these two cities but the Committee believes that a statewide plan of analysis would furnish information whereby education of physicians, hospital personnel and expectant mothers will further reduce the number of maternal deaths. The plan of the Committee was decided upon as dividing the state into two sections, with the secretaries of the two societies working with the Committee on Maternal Welfare to obtain the information and review the cases." He asked for reports from the two sections.

Dr. Wasserman said that a total of 35 cases would be reported by the end of the month, that five have just been reported and not investigated as yet but would be within the time he set.

Dr. Miller said that eight were still to be considered, six outside of Kansas City, and that a total of nineteen would be reported.

It was agreed that information might not all be in and that there might still be cases reported for the calendar year of 1954. After discussion, on motion of Dr. Miller, seconded by Dr. Wasserman, it was decided that the reporting year end on October 31 each year.

Title and content of the presentation by the Committee on the scientific program of the Annual Session was discussed. It was decided that the title would be "Major Causes of Maternal Death in Missouri in 1954." It was decided that the presentation should deal with problems rather than statistics, stressing the main causes of deaths, together with the necessity of autopsy in some cases, and the importance of prenatal care. Dr. Cox said that the Committee would request a round table luncheon meeting at the 1956 Annual Session. Dr. Miller said that the Kansas City group intended adding an internist and a general practitioner to its group.

It was stressed that it should be publicized that the meetings at which the reported deaths were analyzed were open meetings and that any physician could attend.

Dr. Garner presented a map showing the distribution of maternal deaths in the state, showing: urban 6.2, Southeast section, 15.5, Ozark Upland section 6.1 and the Plains section 8.2. These figures were for a five year period. On motion of Dr. Miller, seconded by Dr. Wadlow, it was voted that this form of reporting deaths be used in the future.

The possibility of studying all maternal deaths in the state was discussed and it was the consensus of the group that the Committee desires to work with other professional organizations in Missouri to study the total number of maternal deaths in Missouri whenever that is feasible.

Miss Scherer and Miss Vaughn from the Department of Health and Welfare presented a pamphlet "Help for Unmarried Mothers" which they wished approved and distributed to physicians in the state. It was pointed out that the pamphlet did not list commercial agencies. After discussion, on motion no action was taken.

Dr. Wachter quoted from a study of 12,600 babies and gave figures on reactions to various prophylactic treatment of the eyes in the newborn. It was pointed out that the determination of what is used is a ruling of the Division of Health and can be made by the Division upon recommendation. After general discussion, on motion of Dr. Wadlow, it was voted that the Committee recommend that ointment containing 100,000 units per gram of penicillin with expiration date not exceeded be permitted to supplant the use of silver nitrate solution in the eyes of the newborn in hospitals in Missouri on request of the hospital to the Director of the Division of Health.

Programs of an institute on Maternal Health to be presented by the Division of Health on February 10, 11, 12, at the Governor Hotel in Jefferson City, were distributed.

Kenneth E. Cox, Chairman,
Joseph L. Johnston,
E. E. Wadlow,
E. Lee Dorsett,
Leo J. Hartnett,
G. L. Miller,
William See,
James E. Keeler,
Helman C. Wasserman,
John E. Burch,
Francis R. Burns,
Charles M. Grace.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Infant and Child Care, Daniel B. Landau, M.D., Hannibal, Chairman, follows:

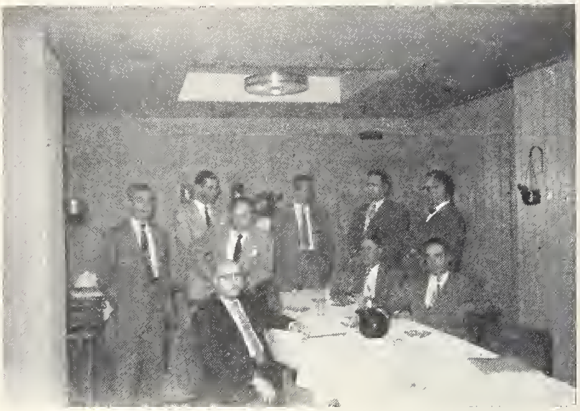
REPORT OF THE COMMITTEE ON INFANT AND CHILD CARE

The Committee on Infant and Child Care initiated an exploratory meeting on school health problems of a selected group of state-wide organizations. This meeting was held in Jefferson City on September 22, 1954, with representatives of the State Division of Health, the State Teachers' Association, the Missouri State Dental Association, the State Department of Education and the State Congress of Parents and Teachers present.

The agenda included discussion of the following:

1. Education toward creating a desire for a health program in schools.
2. Pre-school and periodic examination of students.
3. Examinations of teachers and all school personnel in contact with pupils.
4. Accident prevention and safety recommendations.

Several leaders of the Missouri School Administrators' Association have been interviewed by Mr. Ray McIntyre, and plans are being made for a larger meeting to include consideration of specific school health problems presented by the School Administrators.



The Committee on Infant Care had an active year.

The Committee is advising hospitals throughout the state to purchase the latest edition of the book, "Hospital Care of Newborn Infants," obtainable through the American Academy of Pediatrics.

The question of the use of silver nitrate, as opposed to penicillin and newer antibiotics, in the eyes of newborn infants has been under consideration. Further thought and study are being given to this subject.

The Committee is working on plans for the dissemination of information, regarding the early diagnosis and the care of the erythroblastotic infant.

An early meeting is planned with representatives of the State Division of Health to consider plans of the National Foundation for Infantile Paralysis for use of polio vaccine in 1955.

Two members of the Committee are serving on the program planning committee for a three day School Health Workshop in June, 1955, to be held at the state college at Warrensburg, Missouri.

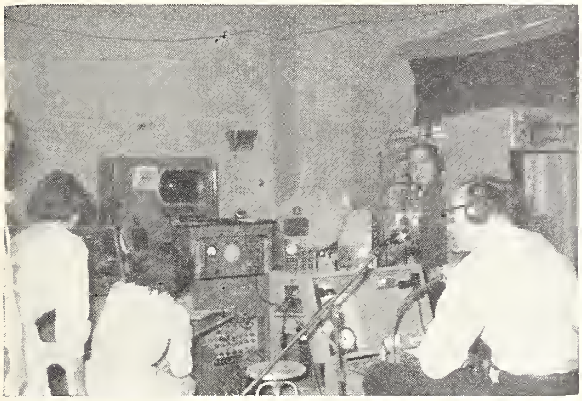
Daniel B. Landau, Chairman,
H. Ewing Wachter,
Raymond J. LaDriere,
Guy N. Magness,
John S. Sennott,
O. B. Barger,
Roy F. Garrison,
Eugene J. Schwartz,
Jack N. Wiles,
W. E. Henrickson.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on Health and Public Instruction, A. W. McAlester, III, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

The Committee is pleased to note the increasing number of radio health programs sponsored by County Medical Societies or their Woman's Auxiliaries, or both, on the air from stations over the state outside of metropolitan areas. Radio listening polls, taken from time to time, show that people in small towns and rural areas listen a great deal to their local stations. They also read their local newspapers. Possibly a sense of pride is a stimulus for this local interest or maybe a fear of missing some "juicy" local gossip or other news prods these activities. Anyway, health programs over these local radio stations reach a large audience. In most cases, the majority of such stations have air-time which they are pleased to offer as a free public service for good health education programs. The Bureau of Health Education of the A.M.A. maintains a fine library on health education transcriptions for radio. These may be borrowed from the A.M.A. by County Societies or their Auxiliaries for use over local stations. The A.M.A. has also instituted a library of scripts and films suitable for televised health education programs.



Much technical help was used in the television presentation.

The Committee recommends that County Societies and their Auxiliaries study the advisability of promoting health education features over their local television stations in addition to continued sponsorship by radio and other media.

The Committee also congratulates the societies in the more metropolitan areas of the state on the quality and quantity of health education programs they are regularly sponsoring over both radio and television.

Health Forums in the form of scheduled open public meetings with the programs furnished by the Medical Societies or Auxiliaries have continued during the last year to demonstrate a useful public service. Health day teas and luncheons given by County Society Auxiliaries are growing in favor and effectiveness.

A number of Auxiliaries are sponsoring "Doctors' Day" on March 30 in commemoration of Dr. Crawford Long's first successful use of anesthesia on March 30, 1842. The day is observed by honoring the doctors with dinners, flowers and publicity for their service to their communities. It provides an opportunity to publicize the rapid strides made by American medicine.

The Committee sponsored an outstanding health education exhibit at the Missouri State Fair at Sedalia, August 22-30. The display entitled "Your Heart" was secured on loan from the Bureau of Exhibits of the A.M.A. Some 500,000 people attended the 1954 State Fair and a good number of these visited the Education Building where the "Your Heart" display was exhibited.

The Committe recommends again that County Medical Societies and their Auxiliaries consider carefully the possibilities offered by local county fairs for displaying sound health exhibits and disseminating authentic, effective health educational materials.

A. W. MCALESTER, III, Chairman,
EDGAR A. BELDEN,
HENRY C. WILLUMSEN,
JOHN T. CROWE,
J. EARL SMITH.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Constitution and By-laws, Paul Baldwin, M.D., Kennett, Chairman, follows:

REPORT OF THE COMMITTEE ON CONSTITUTION AND BY-LAWS

The Committee on Constitution and By-laws has not met during the last year. Since the Revised Constitution and By-laws were adopted in 1952 after considerable study, and quite thoroughly studied by the standing Committee on Constitution and By-laws since that time with appropriate changes made, it was felt that only specific changes needed to be considered by the Committee during this year.

No proposed amendments have been submitted to either the Committee or the Association office since the last Annual Session so the Committee has not been called into session.

If any member does have amendments they wish introduced, the Committee will be glad to handle them at the time of the Session.

PAUL BALDWIN, Chairman,
W. A. BLOOM,
CURTIS H. LOHR,
H. M. PARKER,
W. L. ALLEE.

The Speaker referred this report to the Reference Committee on Amendments to the Constitution and By-laws.

The report of the Committee on Conservation of Eyesight, C. Souter Smith, M.D., Springfield, Chairman, follows:

REPORT OF THE COMMITTEE ON CONSERVATION OF EYESIGHT

The Committee on Conservation of Eyesight met in St. Louis on October 31 with the following present: C. Souter Smith, M.D., Springfield, Chairman; Robert S. Minton, M.D., St. Joseph; Robert D. Mattis, M.D., St. Louis; G. J. Tygett, M.D., Cape Girardeau; D. E. Eggleston, M.D., Macon; James R. Amos, M.D., Jefferson City; Mr. T. R. O'Brien and Helen Penn, St. Louis.

A request from Dr. Amos was transmitted through the Council that the Committee study and make recommendations on trachoma work in Missouri. The incidence of trachoma was discussed, it being stated by all present that old cases were being seen but that there were practically no new cases.

Dr. Amos presented the question as to the necessity of maintaining the Trachoma Hospital at Rolla, giving statistics on facilities, bed occupancy and the decreasing number of cases reported by year. Following discussion by all present, on motion of Dr. Eggleston, seconded by Dr. Mattis, it was voted that based on studies by the Association in 1952 on the incidence of trachoma in the State of Missouri, surveys by Drs. Brailey and Thyggeson, an epidemiological study made by Dr. Cady of the USPHS and other independent reports by ophthalmologists in Missouri, which indicated that the eye disease, trachoma, as a potential cause of preventable blindness, is no longer a public health problem in Missouri, new cases being exceedingly rare and modern therapeutic measures having reduced the problem to one of minor importance, the Committee on Conservation of Eyesight recommends that the Division of Health set a definite date in the near future when the Trachoma Hospital at Rolla will no longer accept patients for hospital care; that the outpatient clinic be continued for approximately one year after the closing of the hospital, and that the field clinics of the Trachoma Hospital staff be discontinued effective June 1, 1955; that the legislature of Missouri be advised and that appropriations of the General Assembly for the biennium, 1955-1957, reflect this recommendation.

The testing of eyes of school children was discussed and Dr. Smith asked Dr. Mattis to review the work of the Committee. He reviewed the work of the Committee in having charts and instructions prepared which the Department of Education had said they would distribute to all schools in Missouri; however, that seemingly they were not distributed for fairly wide inquiry had not revealed any in the schools. He told of the work in 1946 in which 600 school children were tested by a commercial apparatus and then tested in an eye clinic in one of the universities, revealing a 20 per cent error each way, or a gross error of 40 per cent. Dr. Mattis said the National Society for the Prevention of Blindness had conducted screening tests of school children in several states, working with a sorority and Junior League, going into the state and training those who would do the actual screening. He said that a representative of the National Society was to be in St. Louis in November and suggested that state-wide work be done in addition to the work the Society is planning in St. Louis. On motion of Dr. Mattis, seconded by Dr. Minton, it was voted that the National Society for the Prevention of Blindness be invited to screen the eyesight of school children in the State of Missouri.

Dr. Minton said that half of the school children were screened each year in St. Joseph which, with the continuing work, brought rechecks at certain intervals. He gave figures for the school year 1953-1954 as 6,496 children screened, 1,139 visual defects found with 880 visual corrections. He said that the Snellen test was used and that the supervisor of health and physical education of the school system would appreciate an expression of the relative values of commercial eye testing apparatus and the Snellen test.

Following discussion by all present and agreement that many unnecessary referrals were made with the use of commercial eye testing apparatus, on motion of Dr. Mattis, it was voted that based on a study made in St. Louis, work by the National Society for the Prevention of Blindness and personal experience of ophthalmologists in the state, all of which pointed up inaccuracies in sight screening by commercial apparatus, the Committee recommends that commercial apparatus not be used and that the Snellen eye chart is the preferable method of sight screening. It was thought that this information should go to the Department of Education, the Lions Club and state teachers' colleges, University of Missouri, Kirksville and others who are interested in eye screening work. School administrators were considered an important group as directing such work. It was suggested that it be attempted to place information in the state school journal; also that contact be made with the group with whom the Committee on Infant and Child Care is working toward better health in school children.

A film prepared by the National Society was discussed and Dr. Amos said it was to be tried as a television presentation over a Columbia station.

Eye accidents were discussed and Dr. Amos said that he had been requested to give figures on the number and causes of eye accidents in Missouri and that the Division of Health would attempt to do so, using reports submitted by plants and factories.

C. Souter Smith, Chairman,
Robert S. Minton,
A. N. Lemoine,
H. B. Stauffer,
Robert D. Mattis,
John McLeod,
G. J. Tygett,
George Hornback,
C. H. Brady,
Theodore Sanders,
D. E. Eggleston,
A. A. Drake,
Willam B. Wilcoxen,
W. L. Post.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Venereal Disease, E. M. Cannon, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON CONTROL OF VENEREAL DISEASE

The Committees on Control of Venereal Disease and Laboratory Medicine met together in Jefferson City at the Missouri Hotel on January 26, 1955. The following were present: Drs. A. W. Neilson, St. Louis; Charles C. Dennie, Kansas City; James C. Cope, Columbia; E. M. Cannon, St. Louis; O. E. Hagebusch, St. Louis; Henry C. Allen, St. Louis; B. C. Portuondo, St. Louis; James R. Amos, E. C. Belden, Mr. John Hove and Mrs. Adams of the State Division of Health, Jefferson City; and Mr. T. R. O'Brien, Executive Secretary, Missouri State Medical Association, St. Louis.

The Chairman reviewed the action taken by the Committee on Control of Venereal Disease in 1954, appearing on pages 21 and 22 of the "Reports of Officers and Committees," 1954, and reading as follows:

"The Committee appeals to the laboratories to report at least the number of separate, unduplicated cases of positive serology, so as to help the Committee answer the following questions: (1) Has syphilis decreased as much as is thought? (2) Is penicillin treatment as effective as it is thought it is? (3) Is contact investigation as important as it is thought it is?

"The Committee, on motion, duly seconded, adopted the following resolution: 'That all approved private and hospital laboratories report all separate and unduplicated cases of positive serology to the Chairman of the Venereal Disease Control Committee.' "

The Council, in reviewing the report, recommended that the Committee on Control of Venereal Disease meet with the Committee on Laboratory Medicine and that action taken be referred back to the Council.

The Committee on Control of Venereal Disease appealed to the Committee on Laboratory Medicine that private and hospital laboratories report positive serologic tests to the Division of Health, stating physician's name, patient's name, address, age and sex. It was stressed that the control of venereal diseases hinges upon morbidity reporting. Without it, the Committee and Division of Health are unable to know what the

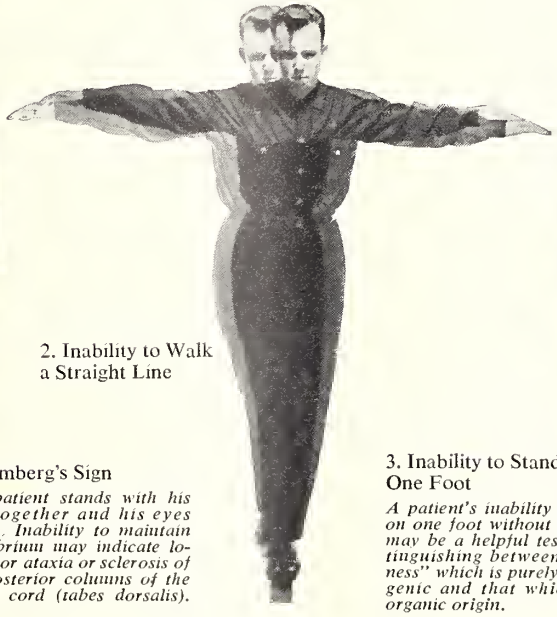
DRAMAMINE® IN VERTIGO

Notes on the Diagnosis and Management of "Dizziness"

II. False Dizziness

1. Romberg's Sign

The patient stands with his feet together and his eyes closed. Inability to maintain equilibrium may indicate locomotor ataxia or sclerosis of the posterior columns of the spinal cord (tabes dorsalis).



2. Inability to Walk a Straight Line

3. Inability to Stand on One Foot

A patient's inability to stand on one foot without lurching may be a helpful test in distinguishing between "dizziness" which is purely psychogenic and that which is of organic origin.

False dizziness is a sensation of sinking or lightheadedness which is often of psychogenic origin. It should be distinguished from true "dizziness" or vertigo[1] in which there is a definite whirling, moving sensation.

Unsteadiness, lightheadedness and similar manifestations of false dizziness[2] may be psychogenic or the result of arteriosclerosis, hypoglycemia, drug sensitivity and general metabolic disturbances such as anemia and malnutrition. Hypertension is often the cause of these symptoms.

Psychogenic dizziness probably originates at the highest brain centers. It may be described as a sense of uncertainty with occasional mild lurching but not to the point of falling. In these patients there is no nausea, no disturbance of vestibular pathways and otologic and neurologic examinations are negative. The sensation is unaffected by head movement. Symptoms usually disappear[3] with complete rest.

Dramamine® has been found highly effective in many of the conditions already mentioned. Maintenance therapy with Dramamine will often keep the patient from becoming incapacitated by his condition.

Dramamine is also a standard for the management of motion sickness and is useful for relief of nausea and vomiting of fenestration procedures and radiation sickness and for relief of "true dizziness" of other disorders.

Dramamine (brand of dimenhydrinate) is supplied in tablets (50 mg.) and liquid (12.5 mg. in each 4 cc.). G. D. Searle & Co., Research in the Service of Medicine.

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1. Swartout, R., III, and Gunther, K.: "Dizziness:" Vertigo and Syncope, GP *8*:35 (Nov.) 1953.
2. DeWeese, D. D.: Symposium: Medical Management of Dizziness. The Importance of Accurate Diagnosis, Tr. Am. Acad. Ophth. *58*:694 (Sept.-Oct.) 1954.
3. Kunkle, E. C.: Central Causes of Vertigo, J. South Carolina M. A. *50*:161 (June) 1954.

SEARLE

extent of the problem is, what the incidence is and what the trend is.

The Committee on Laboratory Medicine was opposed to private and hospital laboratories reporting names of patients having positive serology. It is their thinking that the responsibility of reporting lies with the referring physician.

The Committee on Laboratory Medicine recommended that laboratories report all positive serologic tests by patient's name to the private physician on a multiple detachable card form. One card would be the physician's confidential venereal disease morbidity report which he would forward to the Division of Health. The laboratory would also forward the serum number without name to the Division of Health on a card form, and thus the Division of Health would have a check on the physician's morbidity reporting. On motion, the recommendation was approved. The two Committees agreed to formulate a reporting card and submit it to members of each Committee and the Division of Health for approval.

The Division of Health reported that for the year 1954, there was a 3 per cent decline in the incidence of venereal diseases in the State of Missouri, excluding St. Louis and Kansas City. In St. Louis for the year 1954, 24 cases of primary and secondary syphilis were reported (eight by private physicians), 181 cases of early latent syphilis (83 reported by private physicians). This is a marked decrease, for in the year 1953, 71 cases of primary and secondary syphilis were reported and 272 cases of early latent syphilis. For 1954, 2,186 cases of gonorrhea were reported, which is a slight decrease compared to 2,436 cases reported in 1953.

Informal conferences were many.

The Division of Health reported that the fee for service to physicians who treat indigent venereal disease patients is being continued. Due to reduction of federal funds, the fee for service has been curtailed to pay physicians only for cases of gonorrhea, primary and secondary syphilis. For the first six months of the fiscal year, 83 cases of gonorrhea and 29 cases of primary and secondary syphilis were treated.

Dr. Belden stated that only about 25 per cent of positive premarital serologic tests are reported to the Division of Health.

Dr. Neilson emphasized and discussed the importance of an educational program for the control of venereal disease.

A scientific exhibit, demonstrating syphilis epidemiology, was discussed and it was agreed that the exhibit be prepared by the Division of Health and the Committee and that the State Medical Association be asked to include it among scientific exhibits at the annual session in Kansas City.

Dr. Belden plans to submit an article "Interpretation of Serologic Tests for Syphilis" for publication in Missouri Medicine.

Dr. Dennie proposed a panel for the 1956 state meeting. The recommendation was approved. The subject planned is "Integration of Serologic Findings in the Total Picture of Syphilitic Disease."

The Chairman of the Committee announced that Dr. Evan W. Thomas of the Bureau of Venereal Disease Control of the State of New York will address the Academy of General Practice in St. Louis on February 22, 1955.

The Committee wishes to thank Mr. T. R. O'Brien, Executive Secretary of the Missouri State Medical Association, Dr. E. A. Belden and Mr. John Hove for their wholehearted cooperation in assisting the Committee.

E. M. Cannon, Chairman,
William B. O'Connor,
James C. Cope,
Charles C. Dennie,
A. W. Neilson,
R. J. Murphy,
W. L. Davis.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Hospital and Professional Relations, Hollis Allen, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON HOSPITAL AND PROFESSIONAL RELATIONS

The principal function of this Committee since its formation has been to represent the Association as one of the three groups which make up the "Missouri Conference on Improvement of Care of the Patient." The other two groups are the Missouri Hospital Association and the Missouri Nursing Association.

The Conference was formed five years ago by representatives of the three organizations to stimulate, assist in and sponsor activities which will contribute to the improvement of patient care. Three representatives serve from each organization, in addition to the president and executive secretary of each group as ex officio members. Recommendations of the group, if adopted unanimously, are then referred to the executive boards of each of the sponsoring organizations. Action of the executive boards must be unanimous before the Conference itself may announce final disposition.

The Conference is modeled after a similar one established at the national level by the American Nurses Association, the A.M.A. and American Hospital Association. The Chairman believes that the Conference has afforded a real opportunity to become better acquainted with representatives of the other groups and has given each of them an opportunity to "let their hair down" and discuss real or imaginary problems in a good fashion. Other members of MSMA who have served or are serving on the Committee are Paul N. Johnstone, M.D., Kansas City. Dr. Johnstone served as Chairman of the Conference and contributed much of his time, energy and talents toward furthering its work. Dr. C. Gordon Stauffacher, Sedalia, served as a member for three years. Dr. Stanley S. Peterson, Springfield, is beginning his second year as a member of the Conference. Dr. C. M. Waggoner, Columbia, was elected as a member for three years at the latest meeting of the Conference held Jan. 10, 1955. The Chairman of the Conference for 1955 is Dr. Hollis N. Allen, St. Louis.

Perhaps the best method to use in explaining the work of the Conference is to include as part of this report "Progress Report of the Joint Conference for the Improvement of Patient Care, 1950-1954."

Report

The Joint Conference for the Improvement of the Care of the Patient has made rapid strides in fostering better relations between hospitals, nurses and doctors. In existence for only three years, the Joint Conference has achieved many worth-while improvements in the Care of the Patient.

Among the more important items were:

1. Consideration of legislation to change the Nurse Practice Act so that practical nurses might be licensed.

The nursing practice act was enacted in the 1953 session of the Legislature and is now the law of our state. All registered nurses are included on a compulsory licensure basis. Practical nurses are licensed on a voluntary basis. Many compromises were necessary before the act was passed. These were successfully worked out in deliberations of the Joint Conference —and it is believed that the law, as enacted, will bring lasting good results in the clarification of nursing standards.

2. Consideration of standards for nursing homes, rest homes and boarding homes.

Legislation was drafted and introduced in the Legislature to set up standards and provide for inspection and licensing of nursing homes, rest homes and boarding homes. The Missouri Association of Licensed Nursing Homes recommended the legislation following meetings with representatives of the Joint Conference. Though much interest was expressed in the Legislature, the legislation failed to pass, and it will again be considered at a later session. The Joint Conference stands ready to help at all times in consideration of standards for such homes.

3. Consideration of definition for chronic disease hospital beds in order to assist State Division of Health in administration of Hill-Burton Hospital program.

Under the Hill-Burton law, federal government funds were available in Missouri for the construction of chronic disease hospital beds. Our greatest shortage of hospital beds exists in this area. But authorities of the State of Missouri could not define a chonic disease hospital bed. And hence quite a large amount of money was involved in this administrative handicap, to say nothing of future funds that would be so involved. Application was made to the Missouri State Medical Association about the matter.

Much material was accumulated from many authoritative sources. A chronic disease hospital bed could not be absolutely defined, but it was found possible to give such characteristics about a chronic disease hospital bed which would differentiate it from other hospital beds, and would allow monies from the Hill-Burton funds to be spent for their construction in Missouri.

The nurses and the hospitals are also involved in this matter. Hence, through the Joint Conference for the Improvement of the Care of the Patient, the doctors and the nurses and the hospitals of Missouri recommended these statements and approved them in the form of six resolutions.

4. Consideration of a Hospital Licensing Act.

The Conference reviewed a hospital licensing bill introduced by the Missouri Hospital Association. No particular action was necessary because of the widespread support in the legislature. The Act was signed by the Governor and became law in September, 1953.

5. Consideration of income tax deduction for medical expenses.

Legislation, approved by the Joint Conference and by the three sponsoring organizations, was introduced in the General Assembly to provide for total deduction of medical care expenses from the state income tax.

The Missouri Assembly enacted this legislation. And the Governor of Missouri found no objection to the legislation, though he vetoed the bill containing this provision because it contained other unrelated provisions to which he did object. When this becomes the law, it will have the effect of proportional reduction in the cost of medical care to the sick. They will be much better able to meet the increases in voluntary and university hospital cost now in process of occurring.

Tax deduction for medical care expenses has received much consideration by state and federal taxing authorities. A forward step has been made by the federal government that permits the entire deduction of medical expenses for those over 65 years, with a maximum of $1,250. The present Congress of the United States is considering legislation to change the formula. At present, medical expenses in excess of 5 per cent of gross income may be deducted. The proposed plan would reduce this to 3 per cent. All reports indicate that the legislation will pass and while the deduction will mean much to those who have heavy expenses for illness, studies by this group will be continued looking toward further tax deduction for all medical expenses.

Round table luncheons furnished discussion periods.

Many studies have been made to show how the inflationary spiral has hit the cost of caring for the sick. The costs of over-all medical care have increased and particularly in the field of hospitalization. Here the demands of modern medicine for improved hospital facilities and nursing care, coupled with the general commodity index, are reflected.

Price, Waterhouse and Company, who audit the one hundred member hospitals of the St. Louis Blue Cross Plan found that for the six month period ended December 31, 1948, the average cost of all these hospitals was $11.82 a day. The average cost of the same hospitals on June 30, 1953, was $15.95, or an increase of 35 per cent since 1948.

The Bureau of Labor Statistics found that from 1948 to 1953 the commodity index average increased 14.02 per cent for St. Louis.

This large increase in hospital cost above the average is by no means limited to the St. Louis area, and it is the direct result of improved care of the sick in hospital operation throughout America. The doctors, the nurses and the hospitals of Missouri have long recognized that increase in cost much accompany progress in the care of the sick. We intend to further improve the care of the patient.

The efficiency of medicine has now become so great that for the first time in the history of man a large aged population is developing. The fact of this developing large aged population demonstrates conclusively the efficiency which modern medicine has attained. We are mindful that perfection in patient care can be more closely approached, and we intend to try to do so. We also are mindful that these additional improvements will have attendant costs. As we accomplish these improvements we, therefore, expect these increased costs. We recommend that government allow now necessary tax advantage for those who must pay these costs.

Hospitalized catastrophic illness which requires around the clock special nursing care and much medical care as well, now presents a formidable financial problem to many families. Appropriate income tax deduction should now be allowed for all hospitalized patients, and should include all medical, hospital and nursing care, and insurance against that care. This tax advantage will become even more advisable as we further improve the care of the patient. We recommend that government allow now necessary tax advantage for those who must pay these costs.

Hollis Allen, Chairman,
Stanley S. Peterson,
C. M. Waggoner,
Paul N. Johnstone,
Milton Shoss.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Laboratory Medicine, Richard V. Riddell, M.D., St. Joseph, Chairman, follows:

REPORT OF THE COMMITTEE ON LABORATORY MEDICINE

The Committee of Laboratory Medicine met for the first time in July, 1954, in Jefferson City, with all members present. This meeting was called to meet with Dr. Amos and members of the laboratory division of the State Division of Health to help draft rules and regulations for laboratories under the State Hospital Licensing law. After a morning and afternoon session certain rules and regulations and a satisfactory code of compliance were agreed upon to be submitted to the State Medical Advisory Committee. A thorough discussion of requirements for approval of all laboratories and serological testing in Missouri was held.

The committee met for the second time jointly with the Committee on Control of Venereal Disease with all members present on January 26, 1955, in Jefferson City. A complete report appears with the report of the Committee of Control of Venereal Disease.

The Committee met for the third time on March 26, 1955, in Kansas City with all members present. A letter from the Council of the Missouri State Medical Association was read asking the Committee for their advice as to participation in the North Central Blood Bank Clearing House and if in the affirmative to recommend to the Council a member of the Missouri State Medical Association to represent them in this clearing house. It was the unanimous opinion that the state should be represented and the name of Angelo Lapi, M.D., was proposed for the representative. The autopsy permit form which has been used for one year has been approved by the Missouri Society of Pathologists and it is a recommendation of the Committee of Laboratory Medicine that this form also be approved by the Missouri State Medical Association.

The problem of comprehensive Blue Cross and Blue Shield contracts and their coverage of laboratory service under Blue Cross was discussed and there was unanimous agreement opposing this coverage under Blue Cross instead of Blue Shield. It was agreed to submit the following resolution to the House of Delegates of the Missouri State Medical Association.

Whereas, The performance and interpretation of laboratory examinations have been repeatedly defined as the practice of medicine, and

Whereas, Present and proposed Blue Cross contracts include these medical services, and

Whereas, All other medical services are covered under Blue Shield, therefore be it

Resolved, That the House of Delegates of the Missouri State Medical Association vigorously protest the continued inclusion of these medical services in Blue Cross contracts and recommend their coverage under Blue Shield contracts only, and be it further

Resolved, That copies of this resolution be sent to all Blue Cross and Blue Shield organizations operating in the State of Missouri.

Richard V. Riddell, Chairman,
Jack H. Hill,
Henry Allen,
B. C. Portuondo,
Omar Hagebusch.

The Speaker referred the resolution contained in the report to the Reference Committee on Resolutions and the remainder of the report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Tuberculosis, Paul Murphy, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON TUBERCULOSIS

The Committee and the Missouri Division of Health have developed an excellent working relationship in the matter of tuberculosis control programs for the state. The committee has regularly been consulted by the Division of Health for advice and approval of its tuberculosis control activities.

On November 14, 1954, a meeting was called in Jefferson City by the Missouri Division of Health to discuss "Present and Proposed Tuberculosis Control Programs for the Division." Dr. E. A. Belden of the Division of Health presided. This committee was invited with the majority of the members present. Representatives from a number of other organizations interested in tuberculosis control were also included. The following résumé represents the outcome of a reasonably full discussion of the items enumerated:

Proposed Tuberculosis Control Program for the Division of Health.

I. Casefinding:

1. The present mass x-ray survey program will be expanded, first by the addition of portable equipment for taking 14 by 17 films on 70 mm. film suspects, and later by the addition of one or more mobile units to permit re-surveys at more frequent intervals than at present. This will necessitate additional health education and nursing follow-up services as well as an enlarged x-ray technician staff.

2. Routine hospital admission x-raying will be encouraged. Plans for financial subsidies to hospitals carrying out this service are under consideration.

3. Although the Division does not plan to participate directly in tuberculin testing surveys, a policy concerning acceptable tuberculin testing surveys will be established for the information and guidance of those who wish it. Emphasis will be placed on adequate planning, competent performance and interpretation of the test, and adequate follow-up of reactors and their contacts.

4. Consultation and financial aid will continue to be offered to local health units in the interest of attaining the best possible tuberculosis casefinding and control programs.

II. Missouri State Sanatorium:

1. Hospitalization of patients will continue to be encouraged for purposes of diagnosis and evaluation, patient education, treatment and isolation.

2. The hospital has established a residency program in thoracic surgery and plans to establish a residency program in thoracic medicine. The hospital facilities will be offered to Missouri University Medical School for teaching purposes.

3. A program in nursing education is being developed to include an orientation course for public

Relaxed but awake

In emotional and nervous disorders, Mebaral exerts its calming influence without excessive hypnotic action.

Mebaral is also a reliable anticonvulsant.

INDICATIONS:

Because of its high degree of sedative effectiveness, Mebaral finds a great field of usefulness in the regulation of agitated, depressed or anxiety states, as well as in convulsive disturbances. Specific disorders in which the calming influence of Mebaral is indicated include neuroses, mild psychoses, nervous symptoms of the menopause, hypertension, hyperthyroidism and epilepsy.

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Tasteless **TABLETS**

Sedative:
32 mg. (½ grain) and
new 50 mg. (¾ grain)
Antiepileptic:
0.1 Gm. (1½ grains)
and 0.2 Gm. (3 grains)

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nurses. Basic student nursing education in tuberculosis will be offered to schools of nursing through affiliations.

4. The services of the out-patient clinic will be improved but restrictions will be placed on the number of patients served. To handle the increasing hospital out-patient load, the establishment of area diagnostic and post-hospitalization follow-up clinics is under consideration. Earlier hospital discharge and the need for continued long term supervision and treatment has markedly increased the number of outpatients.

III. General:

1. Greater emphasis will be placed on rehabilitation service to patients.

2. Continued emphasis will be placed on qualitative and quantitative improvement in morbidity reporting. Morbidity and mortality data will be collected, tabulated and summarized in annual reports. The procedures are necessary for public health supervision of cases and contacts, for program planning and direction, and for the information of interested persons and agencies.

3. Efforts will be directed toward stimulating and assisting local public health units in the establishment and operation of tuberculosis case registers.

Dr. Walter C. Gray, Chairman of the Tuberculosis Committee of the St. Louis Academy of General Practice, presented the patch test program of the St. Louis Academy of General Practice. He stated that the Academy in cooperation with the St. Louis County Health Department and the St. Louis Tuberculosis and Health Society had developed a patch testing program for children in public and parochial schools in St. Louis County. Results to date have been most excellent and there is a long waiting list of school children for initial as well as repeat testing.

Dr. Gray stressed the public relations benefits to be gained by the establishment of such a procedure. Several present commended Dr. Gray for his efforts and urged that similar programs be considered in other parts of the state.

Paul Murphy, Chairman,
I. J. Flance,
E. E. Glenn,
Lawrence E. Wood,
J. L. Mudd,
C. A. Brasher,
W. P. McDonald,
F. E. MacInnis,
H. L. Greene.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Study of Cardiac Diseases, E. Lee Shrader, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON STUDY OF CARDIAC DISEASES

The Committee on Study of Cardiac Diseases met in Jefferson City on October 24, with the following present: Drs. E. Lee Shrader, St. Louis, Chairman; V. Bryce Ballard, Kansas City; Earl L. Loyd, Jefferson City; W. I. Park, Springfield; G. R. Hudson, Kirksville; J. Will Fleming, Moberly; C. W. Meinershagen, Jefferson City; Mrs. Laura Alice Lee and Mr. William Green, Columbia, of the Missouri Heart Association; T. R. O'Brien and Helen Penn, St. Louis.

Dr. Shrader pointed out that several years ago the Council of the Missouri State Medical Association became concerned with the overlapping of programs and since then the Association has attempted to be a clearing house for dates of meetings of the Association, the Division of Health, the Academy of General Practice and special organizations as the Missouri Heart Association. He pointed out that the Association has attempted to ask the Woman's Auxiliary to assist with lay meetings in connection with scientific programs in county medical societies and councilor district meetings.

Mr. Green said that a lay meeting in which the Woman's Auxiliary was handling publicity would be held at Joplin on November 9. Mr. O'Brien said that scientific meetings had just been scheduled at Poplar Bluff for November 23 and at Sikeston on November 18; also one at St. Joseph on November 3. Mr. Green said the Missouri Heart Association would attempt to have lay meetings in connection with these meetings.

The use of U.S.P.H.S. funds in presenting heart programs by the faculty of St. Louis University, that being the only university able to take part at the time the funds were made available, was discussed.

The meeting of the Missouri Heart Association for a professional program at Camdenton was discussed, it being the feeling of the Chairman that other organizations had not been sufficiently contacted in setting up this meeting. Dr. Fleming pointed out that Dr. Don Carlos Peete had cleared through the Missouri State Medical Association office on dates.

Dr. Shrader stated that there should be a cooperative program between the various organizations promoting educational activities in heart disease throughout the state in order to supplement each other in professional and lay education; in view of the action of the Missouri State Medical Association Council, the administrative office of the Association should be the clearing point on medical education. Dr. Ballard moved that this statement be adopted as the consensus of the group. Motion carried.

Dr. Fleming told of a program being presented in the Joplin area to thirty-one heart patients who had been referred by physicians for the course in dealing with heart disease in the home. He said that thirty-five or forty areas will plan this program. On Dr. Fleming's motion, the Committee approved this program with the suggestion that a letter go to county medical societies stating this approval and asking that the society cooperate with the Missouri Heart Association.

Dr. Shrader called attention to the lack of signatures on articles in the *Heart Bulletin* and questioned its value because of this. Following discussion of this publication and *Modern Concepts* it was decided that a survey should be made as to the demand for the *Heart Bulletin* and the possible substitution of *Modern Concepts* by the Division of Health. Methods of the survey were discussed and it was left to Dr. Meinershagen and Mr. Green to work this out.

E. Lee Shrader, Chairman,
E. J. McIntire,
A. M. Estes,
V. Bryce Ballard,
Earl L. Loyd,
W. I. Park,
G. R. Hudson,
Arthur E. Strauss,
J. Will Fleming.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Alcoholism, Ralph E. Duncan, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON ALCOHOLISM

The last meeting of this Committee was April 5, 1954 at the Hotel Jefferson, St. Louis. Plans were discussed in reference to compiling the data needed for its report on "Alcoholism in Missouri"—and the type of legislation that should be introduced in the 68th General Assembly of the State of Missouri.

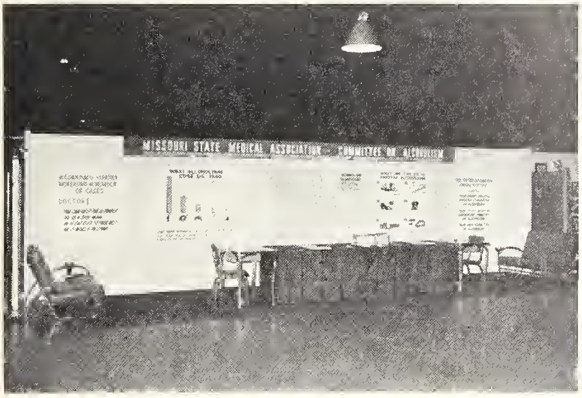
Since this meeting, members of the Committee have participated in the following activities:

"Alcoholism—a Social, a Spiritual Problem" at the Fourth Annual Retreat, Missouri Christian Men's Fellowship, Lake of the Ozarks, August 6, 7, 8, 1954.

Furthering citizens' interest in the Missouri Committee for Education on Alcoholism.

Lectures before groups of members of Alcoholics Anonymous in Columbia, Kansas City and St. Louis, Senior Medical Students at the St. Louis University, Woman's Auxiliary of St. Louis County Medical Society.

Promotion of a public meeting on September 14, 1954, at the Little Theatre of the Municipal Auditorium, Kansas City, where the principal speaker was Oluf Martensen Larsen, M.D., Medical Director, Alcoholics Treatment Center, Copenhagen, Denmark. This meeting was sponsored by the Ralph Foundation for Medical Research.


MISSOURI STATE MEDICAL ASSOCIATION — COMMITTEE ON ALCOHOLISM

The Committee on Alcoholism furnished an exhibit.

Organization of a Greater St. Louis Committee for Education on Alcoholism.

Kansas Conference on Alcoholism, December 1 and 2, 1954, at the University of Kansas, Lawrence, Kansas. The organization of this Conference was outstanding and it is hoped that in 1955 similar conferences can be organized at a number of universities in Missouri.

Distribution of informative literature (mostly prepared by the staff of the Yale Center of Alcohol Studies) requested by interested citizens and members of the Association. Recently a package of literature was furnished on request to a senior high school student who had chosen "Alcoholism" for his thesis.

Probably the most time consuming project of the Committee was in mailing a questionnaire on September 20, 1954, to 3,574 members of the Association (out of state and military members excluded) and compiling and analyzing the answers. Questionnaires were also sent to all the hospitals and clinics listed in the Missouri Section of the American Hospital Association's Directory. At this writing a second questionnaire is being mailed to each of the members who overlooked completing the questionnaire mailed to them on September 20, 1954. The Committee feels that the recorded opinion of most of its members will help to advance toward the Association's adopted policy of doing something about this third health problem in Missouri, accident and heart disease only exceeding in its importance. Copies of the questionnaire and accompanying letters were filed in the Executive Office prior to mailing, and are herewith attached as part of the report (not necessarily to be duplicated in "Report of Officers and Committees," but for reference and filing).

The following Resolution has been prepared to be presented in the present session of the Legislature.

Senate (or House) Concurrent Resolution

Whereas, The problem of alcoholism is ever increasing with its economic and social impact upon the health and welfare of the people of the State of Missouri, and

Whereas, Complete and accurate data as to its extent, its effect and the problems attending it are necessary in order to determine what state programs, if any, are needed or are desirable in the fields of treatment, rehabilitation and research; now therefore be it

Resolved, By the Senate, the House of Representatives concurring therein (or House of Representatives, Senate concurring therein) that a Study Committee on Alcoholism be created, composed of three members of the Senate, to be appointed by the President pro tem, and three members of the House, to be appointed by the Speaker, to study the entire subject in line with this resolution and make its report with recommendations to the 69th General Assembly; and be it further

Resolved, That said Joint Committee may employ such professional and clerical assistance as may be necessary to effectively carry out its duties and that the expense of the said committee shall be paid from the contingent funds of the Senate and House of Representatives in equal proportions.

This resolution was approved by the Association's Committee on Mental Health on Feb. 6, 1955.

The Section on Neurology and Psychiatry of the Jackson County Medical Society approved this Resolution at their regular meeting on January 26, 1955.

The Committee feels that at this time a "Study Committee," composed of members of the Senate and House of Representatives will do more to establish an effective plan than any other method of approach that might now be considered. The Committee feels that the citizens need much in the way of factual information in order that they may give any adopted plan adequate support.

Finally, the Committee is happy to report that the basic data for the "Informative Report on Alcoholism in Missouri" which the House of Delegates, at its Ninety Sixth Session instructed this Committee to prepare, has been published and copies distributed to all the officers, members of the Council, members of the Committee on Mental Health and the Executive Office of our Association. At the present time this basic report is being reviewed by the Community Studies, Inc., of Kansas City, Missouri, for the purpose of offering criticism and suggestions for developing additional phases of the material now in the Committee's hands.

In developing the basic data for the Report on "Alcoholism in Missouri" the Committee was fortunate in enlisting the services of Walter O. Cromwell, M.P.H., Executive Secretary, Health Council of Kansas City. Mr. Cromwell was formerly Director of Wisconsin State Bureau of Alcohol Studies and Executive Director of Chicago Committee on Alcoholism. Mr. Cromwell's experience was particularly valuable in helping to maintain a definite separation between data on alcohol and alcoholism.

The Association has by resolution expressed its interest in alcoholism (a condition in which the excessive use of alcoholic beverages is used by "sick people") not in alcohol *per se*. The Committee recognizes that "Alcohol is a problem" but that it is not a medical problem and that if anything is to be done for the alcoholic (a person who is "sick all over") the Committee must avoid encroaching upon any aspect of "for alcohol" or "against alcohol"—briefly, the dry and wet aspects.

The Committee is indeed thankful for Mr. Cromwell's assistance and especially since it is being rendered on a voluntary basis.

A revised copy of the Committee's report on "Alcoholism in Missouri" is being submitted as a part of this report (not necessarily to be published in the "Reports of Officers and Committees" for the Delegates, but for file and reference). Additional copies of the Report will be available to Reference Committees and to Delegates.

At the coming Annual Session of our Association in Kansas City March 27-30, 1955, the Committee will have an exhibit on "Alcoholism" as it is found in Missouri.

Recommendations: The Committee suggests that the Council recommend to the House of Delegates at its coming meeting in Kansas City, the following:

1. That the aims of the Committee, as outlined in its 1952 report and printed on page 28 of the "Report of Officers and Committees" for 1952, be reaffirmed by the Association.
2. That the Committee on Alcoholism be instructed to continue to promote, with the assistance of the Association's Executive Office and its officers, necessary legislation that will provide the ways and means to meet the problem of "Alcoholism in Missouri" squarely and effectively.
3. That the Committee on Alcoholism be continued.

RALPH EMERSON DUNCAN, Chairman,
KENNETH C. COFFELT,
GEOGRE W. FORMAN,
JOSEPH B. KENDIS,
RICHARD W. MAXWELL,
S. D. SMITH.

The Speaker referred this report to the Council.

The report of the Committee on Rural Medical Service, A. E. Spelman, M.D., Smithville, Chairman, follows:

REPORT OF THE COMMITTEE ON RURAL MEDICAL SERVICE

During the year 1954, forty-four physicians located in Missouri towns of 10,000 or less population. Our physicians' placement bureau in the State Association's headquarter's office was instrumental in effecting a good number of these locations. A large volume of correspondence was carried on with physicians out of the state, as well as in state, concerning suitable places for practice. Much of this correspondence was with interns and residents seeking private practice locations on completion of their formal training periods. The placement bureau receives, from time to time, names of physicians from the A.M.A. Council on Medical Service, who have contacted the A.M.A. directly, expressing interest in Missouri locations. Also, the names of physicians returning from military service, whose home state on entering service was Missouri, are received regularly from the Missouri State Advisory Committee to the Selective Service System.

In addition to the correspondence carried on with most of these potential prospects for Missouri locations, conferences are held with some of them at the Association's headquarter's office. Considerable correspondence with communities and towns seeking a resident doctor, or an additional one, is handled by the bureau. Established physicians seeking an associate, or addition to their group in some cases, have been aided through the bureau's service. The State Medical Association's Field Secretary, in his travels over the state, has acquired much valuable information for the bureau from firsthand observation, as to the desires and needs of localities for doctors.

The Chairman of the Committee and the Association's Field Secretary appeared before a scheduled

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meeting of Kansas City interns and residents interested in general practice, on November 10, 1954, at General Hospital in Kansas City. Rural practice and rural locations were the major topics of discussion at this session.

In early January, 1955, posters for hospital bulletin boards, informing interns and residents of the State Medical Association's placement service, were sent to the administrators of hospitals in the state where interns and residents were training. A covering letter of explanation to the administrators accompanied the posters.

Central High School Concert Choir entertained guests at the annual banquet.

On August 8, 1954, the Committee met formally, at the Sheraton Hotel, St. Louis, to consider a number of rural health problems and related matters. Some of the Committee's thinking, along with certain recommendations and suggestions, are submitted as follows: Important problems were produced by the two Blue Cross plans, when in early summer of 1954, they decided to designate osteopathic hospitals as full participating Blue Cross plan hospitals. This step immediately brought up the question of Blue Shield payments to osteopaths. The Committee agreed that this latter matter may best be left to decision of the respective Blue Shield boards, who are better able to assess all the factors involved.

A three day refresher course on Industrial and Occupational Medicine for General Practitioners was held at the University of Kansas Medical Center, December 6, 7, 8, 1954, which, carrying the endorsement of the Missouri Academy of General Practice, was endorsed by the Committee with certain plans laid for promotion.

The matter of patient requests for advice from their doctors as to the purchase of various commercial health insurance policies seemed to cause all members of the Committee some concern. Remedies for many of the complaints patients present against some of these commercial companies might be (1) buying such policies only from agents established in the community, (2) education of the public to know and understand the policy before buying it, (3) state level insurance grievance committee open to both doctors and patients, and (4) some medical association committee to receive both good and bad information on these policies so that information could be accumulated.

The Committee Chairman and the Field Secretary were directed to explore the possibilities of again presenting the subject of rural medical practice to the state's interns and residents and, if practical, senior medical students. A part of this direction has been carried out as presented earlier in this report.

The Indigent Hospital and Medical Care Survey for the state of Missouri being made in twenty-seven selected counties was reviewed. This study is spon-

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Bumbalo, T. S., Gustina, F. J., and Oleksiak, R. E.: J. Pediat. 44:386, 1954.

White, R. H. R., and Standen, O. D.: Brit. M. J. 2:755, 1953.

against **ROUNDWORMS**

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Brown, H. W.: J. Pediat. 45:419, 1954.

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sored and financed by the Missouri Health Council of which the Missouri State Medical Association is a member. The actual collection of the facts and figures in the survey is being done by the Institute of Research at the University of Missouri. In thirteen of the twenty-seven selected survey counties, the doctors are asked to maintain certain records on indigent patients from August 1, 1954, to February 1, 1955. This is in addition to other sources of survey information. The thirteen counties are: Harrison, Schuyler, Lewis, Cooper, Jefferson, Crawford, Laclede, Polk, Vernon, Cape Girardeau, Butler, Ozark and McDonald.

Only voluntary agency funds are involved in carrying out the survey; no state, or federal funds are used. Mr. Chester Starr, secretary-treasurer of the Health Council, appeared before the Committee and discussed numerous details of the survey. He appealed for a financial contribution from the State Medical Association to aid in completing the survey. The Committee voted to request the Council of the Association to contribute a substantial sum toward completion of this project.

Speakers answered questions at round table luncheons.

The problem of brucellosis in the state was discussed. It was pointed out that the State Medical Association had no representation on the state-wide Brucellosis Committee. The Committee voted that the Association explore the possibility of placing a representative on this Brucellosis Committee.

After considerable discussion as to the assistance the Committee might give to the new four-year medical school of Missouri, as the school develops preceptorships and lectures on general practice, it was agreed that Committee members would send their thoughts and ideas, from time to time, to the Chairman of the Committee for later consideration.

It appears that little interest on the part of many doctors in rural Missouri is being exhibited toward local health council activities. It is well to remember that the main objective of a health council is to mobilize all of the health resources of a community in a manner which will meet best the health needs of that community.

Surely, all can approve that objective. It seems, therefore, reasonable to urge again that physicians throughout the state take an active interest in the development and functions of any such local councils.

On behalf of the Committee, the Chairman was pleased to appear on the program of the Annual Missouri Agricultural College Forum, Columbia, Missouri, November 3, 1954. The paper presented was entitled "Rural Medicine in Missouri." This forum offered an opportunity to bring our message to many of our agricultural leaders throughout the state.

The Committee Chairman acted as representative of the Committee speaking at the postgraduate school program for the veterinarians at Columbia on October 4. The paper dealt with some of the opportunities for the doctor of veterinary medicine in aiding with the public health work in the rural areas.

A. E. Spelman, Chairman,
Francis L. Kozal,
W. A. Broyles,
W. J. Shaw,
Joseph C. Creech,
Charles H. Lewellen,
C. A. McBurney,
A. J. C. McCallum,
John J. Killion.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Council, W. S. Sewell, M.D., Springfield, Chairman, follows:

REPORT OF THE COUNCIL

The Council met at the Sheraton Hotel, St. Louis, June 5, 6, with W. S. Sewell, M.D., Springfield, Chairman, presiding. Those present were Drs. Sewell, Donald M. Dowell, Chillicothe; W. F. Francka, Hannibal; R. O. Muether, St. Louis; Otto W. Koch, Clayton; J. Loren Washburn, Versailles; C. G. Stauffacher, Sedalia; Richard H. Kiene, Kansas City; J. H. Summers, Lebanon; Ben M. Bull, Ironton; H. E. Petersen, St. Joseph; Victor B. Buhler, Kansas City; Carl F. Vohs, St. Louis; Royse Bohrer, Jefferson City; Joseph C. Peden, St. Louis; A. P. Rowlette, Moberly; Daniel B. Landau, Hannibal; Messrs. John W. Noble, Kennett; John Buckner, Springfield; Lemoine Skinner, James Koenig, Ray McIntyre, T. R. O'Brien, St. Louis.

ANNUAL SESSION

Mr. O'Brien gave the dates of the 1955 Annual Session as March 27-30 and presented a suggested outline for the session:

Sunday, March 27, 1955

1:30 p.m. House of Delegates.
4:00 p.m. or later. Reference Committees.
6:00 p.m. Adjourn.
7:30 p.m. Reference Committees, if needed.

Monday, March 28, 1955

9:00 a.m. Scientific Session.
12:00 noon. Round Table Luncheon.
2:00 p.m. Scientific Session to 3:30 p.m.
4:00 p.m. House of Delegates.
6:00 p.m. Reference Committees, specialty groups or others.

Tuesday, March 29, 1955

9:00 a.m. Scientific Session.
12:00 noon. Round Table Luncheon.
2:00 p.m. Scientific Session to 5:00 p.m.
7:30 p.m. Annual Banquet.

Wednesday, March 30, 1955

9:00 a.m. Scientific Session to 12:00 noon.
1:30 p.m. House of Delegates.

Drs. Buhler and Kiene were asked to decide on hotel headquarters and it was suggested that the first session of the House be held in the hotel, together with reference committees.

UNIFORM INSURANCE FORM

It was reported that a committee of the A.M.A. was working with the Health Insurance Council of America to work out insurance reporting forms on a national basis so there would be uniformity.

NATIONAL SOCIETY FOR MEDICAL RESEARCH

A request for contribution to the National Society for Medical Research was presented and on motion of Dr. Vohs, it was voted that $50.00 be contributed again this year.

SOCIAL SECURITY

The status of the legislation on Federal Social Security was reviewed. As voted out of the House Committee on Ways and Means, physicians will not be included under Social Security.

TREASURER'S REPORT

Dr. Vohs reported on the financial status of the Association and said that expenditures were within the budget. On motion the report was accepted.

FIELD SECRETARY'S REPORT

Mr. McIntyre presented a mimeographed report of county society meetings with programs under the auspices of the Missouri Academy of General Practice held during the year, together with the attendance at the meetings. He also mentioned regular meetings of other societies where scientific programs were not furnished by the Academy.

The Council considered many questions during the year.

He reported that Newton County was in the process of hyphenating with the Ozarks Medical Society and, on motion, it was voted that Dr. Sewell and Mr. McIntyre arrange this prior to September 1. The 50th Anniversary celebration of Buchanan County Medical Society was reported and it was announced that Clay County would celebrate its 100th Anniversary this fall. He reported on the meeting of the St. Joseph Clinical Conference on April 22, the Missouri Health Council on April 30, the Missouri Public Health Association meeting May 6-8. He reported that eight physicians had gone into new locations in smaller towns just recently. The Indigent Care Survey is now being started in thirteen counties and Mr. McIntyre said that physicians in those counties will be asked to attend meetings and be contacted by mail for full particulars on what they will be asked to do to assist.

SECRETARY'S LETTER

Mr. O'Brien said that the response to the Secretary's Letter which went to all members following the adoption by the House of Delegates of the licensure proposal had been commendatory with one exception; also that he had had many telephone calls of approval. It was said that the Committee on Public Policy and Public Relations would have a meeting within the near future and that probably more definite information would be forthcoming at that time.

CONFERENCES

After discussion, on motion of Dr. Buhler, it was voted that any discussion concerning the licensure proposal, either with county society groups or outside groups, should be cleared through the state office. It was suggested that this be placed in the Councilor's reports to county societies.

MEDICAL ECONOMICS

Dr. Rowlette reported that the Committee on Medical Economics studied a questionnaire from the Missouri State Chamber of Commerce, which was referred to the Committee by the Council, as follows:

1. Subject small employers including physicians (with less than eight employees) to the federal unemployment compensation tax of 3 per cent of the employer's payroll, up to $3,000.00, for each employee. Under Missouri Law, such an amendment to the federal law would automatically subject these small employers to a 2.7 per cent state tax which would offset 90 per cent of the federal tax, so that these employers would pay 2.7 per cent on payrolls up to $3,000.00, for each employee to the Missouri Division of Employment Security, and .3 per cent to the federal government.
2. Permit states to grant a reduced tax rate based on experience after one year instead of the present three years.

The Committee decided to go on record as opposed to the extension of unemployment compensation to include groups of less than eight, and favor changing the experience rating period from three to one year.

On motion of Dr. Muether, this portion of the report was accepted.

Dr. Rowlette reported further: The A.M.A. wrote constituent associations with a questionnaire on Medical Ethics, as follows:

1. Section 6 of Chapter I (pages 9 and 10) and Section 5 of Chapter VII (page 24) of the December 1953 Principles establish the Principles of Medical Ethics with respect to "receipt of remuneration for professional services" and "Commissions." The interpretation of these Principles by the Judicial Council is that it is unethical for two physicians who participate in the care of a patient to render a single bill.
2. Do the Principles of Medical Ethics of your state association differ in any significant respect in their application from Section 6 of Chapter I and Section 5 of Chapter VII of the Principles of Medical Ethics of the American Medical Association?
3. What is the policy in your state concerning billing procedures when two or more physicians participate in the care of a patient?
4. How are payments made to physicians by health insurance agencies when two or more physicians serve a patient?

The Committee agreed that the answer to No. 2 was "No"; to No. 3 "Joint billing is considered unethical"; to No. 4 "payment is made to surgeon, no allowance is made to assistants." It was suggested that, while the constitution of the Missouri State Medical Association stated that the A.M.A. Principles of Medical Ethics was that of the Association, it might be well to actually incorporate them.

On motion of Dr. Muether, this portion of the report was adopted.

Dr. Rowlette reported on the study by the Committee of hospital admissions for indigent patients at the University of Missouri, it being pointed out that of Minnesota, Iowa, Wisconsin and Michigan, in three all expenses are paid by the counties and in the fourth by the state and the county. It was pointed out that the ideal was for the county to pay all but that this may not be practical in Missouri. It was pointed out that the survey of indigent care being made by the Missouri Health Council might give some pertinent data. It was decided that the Committee should offer its services to the Board of Curators in any way possible when they have plans definite enough for discussion.

Dr. Rowlette reported that the matter of health institutes, sponsored principally by labor unions in larger cities was felt to be a county medical society problem rather than a state problem and that the Committee had taken no action.

Dr. Rowlette reported that the question of fee schedules for recipients of welfare benefits and the work of the Manion Commission would be studied further by the Committee after data has been acquired.

DOCTORS' DRAFT ACT

Dr. Allen reported briefly and said that probably about 400 physicians would be called by the Navy for June and July; that he assumes that all priority 1 and 2 men will be needed during the remainder of the year. He said that his personal advice had been that any physician who may be liable to draft, should go into service.

COMMITTEE ON FRACTURES

Dr. Kiene presented a report of the Committee on Fractures and called attention to a resolution adopted by the Committee as follows:

> Whereas, Motor car deaths in the United States of America number between 35,000 and 40,000 annually and motor car injuries number about four million annually, and
>
> Whereas, There seems little likelihood of any great reduction of motor accidents in the near future; and
>
> Whereas, Studies by physicians and physicists have clearly shown that motor injuries and motor deaths can be strikingly reduced by the use of safety belts and safety shoulder straps, therefore, be it
>
> *Resolved,* That the Missouri State Medical Association will give all possible aid to those measures which will reduce the frightful mortality and injury rate resulting from the use of motor cars, and be it further
>
> *Resolved,* That the Society hereby recommends to the motor car manufacturers of America that they equip all automobiles with safety belts to meet the specifications of the C.A.A. Technical Standard Order, T.S.O.-C22 A, November 15, 1950; and further recommends that these manufacturers provide seats, cushions, and doors which will withstand impacts of 10 to 15 G's without injuries.
>
> *Resolved,* That they stress the safety features in their automobiles and to stress safety measures in their advertisements to the public.

Dr. Kiene said that the committee had studied recommendations of Wyoming and New York for accident insurance for pupil participants in athletics and physical education programs but that the Committee wished to study this further.

On motion of Dr. Muether, the report was accepted.

MENTAL HYGIENE DIRECTOR

A request from the Jackson County Medical Society's Committee on Psychiatry and Neurology that the Missouri Statutes be amended so that a physician, trained in psychiatry, be Director of the Division, was read. The situation of the last few years was reviewed and it was discussed by Drs. Francka and Kiene and Mr. Noble and Mr. O'Brien. On motion of Dr. Kiene, it was voted that this be referred back to the Committee on Mental Health for further study and recommendation.

COMMITTEE APPOINTMENTS

Dr. Petersen presented the following committee appointments, which were approved by the Council:

Special Committee on Hospital Inspection Act: Drs. H. E. Petersen, St. Joseph; V. B. Buhler, Kansas City; W. S. Sewell, Springfield; Curtis H. Lohr, St. Louis; W. A. Bloom, Fayette; A. P. Rowlette, Moberly; M. K. Underwood, Rolla.

Committee on Physical Medicine: Drs. D. Elliott O'Reilly, St. Louis, Chairman; Horace E. Thomas, Columbia.

Committee on Cancer: Associate Members, Drs. C. W. Meinershagen, Jefferson City; A. N. Arneson, St. Louis.

HOME TOWN CARE OF VETERANS

A request from the Veterans Administration for renewal of the contract for "Home Town Care of Veterans" for the period July 1, 1954, through June 30, 1955, was presented. On motion of Dr. Vohs, it was voted to renew the contract.

COMMITTEE ON ACCREDITATION

The work of the Joint Committee on Accreditation was discussed but no action was taken. It was felt that Delegates to the A.M.A. may bring some information to the next Council meeting.

EDITOR

On motion of Dr. Vohs, Vincent T. Williams, M.D., Kansas City, was appointed Editor for 1955.

PUBLICATION COMMITTEE

On motion of Dr. Buhler, the Committee on Publication was reappointed.

COMMITTEE ON INFANT AND CHILD CARE

Dr. Landau reported briefly on a report of the Committee on Infant and Child Care, copies of the report being given the Councilors. He asked approval of the recommendation of the Committee to hold a conference with the State Division of Health, the State Teachers' Association, the Dental Association, the P.T.A. and the State Department of Education for the discussion of the following objectives:

1. Education toward creating a desire for a health program in schools.
2. Preschool and periodic examination of Students.
3. Examinations of teachers and all school personnel in contact with pupils.
4. Accident prevention and safety recommendations.

On motion of Dr. Summers, approval of this recommendation was voted.

Dr. Landau presented the proposal of the Committee that personnel in small hospitals be trained in the treatment and diagnosis of erythroblastosis. After discussion, in which it was brought out that the procedure was needed so infrequently and was so technical that the practicality of training for treatment was questionable, it was the feeling of the Council that the educational advantage of the program had merit and that the Committee should proceed with it.

CIVIL DEFENSE REPRESENTATIVE

A request from Dr. Carroll Hungate to Dr. Kiene that the Council approve expenses of a representative to a meeting on Civil Defense in San Francisco at the time of the A.M.A. was presented. Following discussion of the expense of attendance at a meeting at such distance and the ruling of the House of Delegates that Delegates and Alternates have expenses paid, to a limited extent, on motion of Dr. Muether, it was voted not to send a representative to the meeting on Civil Defense. It was requested that a review of the amount paid toward the expenses of Delegates be presented at the next meeting of the Council, looking toward a recommendation to the House of Delegates of a more realistic budget for this purpose.

DR. SCHERMAN

It was voted to send flowers to Dr. Victor B. Scherman who is ill.

NEXT MEETING

Dr. Sewell invited the Council to meet in Springfield in the early fall, the exact date to be set later.

Meeting of September 25, 26

The Council met at the Kentwood Arms Hotel, Springfield, September 25, 26, 1954, with W. S. Sewell, M.D., Springfield, Chairman, presiding. Present were Drs. Sewell; Donald M. Dowell, Chillicothe; W. F. Francka, Hannibal; R. O. Muether, St. Louis; Otto W. Koch, Clayton; J. Loren Washburn, Versailles; G. C. Stauffacher, Sedalia; Richard H. Kiene, Kansas City; J. H. Summers, Lebanon; Ben M. Bull, Ironton; H. E. Petersen, St. Joseph; Victor B. Buhler, Kansas City; E. Royse Bohrer, Jefferson City; Carl F. Vohs, St. Louis; A. S. Bristow, Princeton; James R. Amos, Jefferson City; Henry Allen, St. Louis; Durward G. Hall, Springfield; Messrs. Jasper Smith, Springfield; John Buckner, Springfield; Ed Schneider, James Koenig, Lemoine Skinner, Ray McIntyre, T. R. O'Brien, St. Louis; John A. Hailey, Jefferson City. Drs. F. L. Feierabend, Kansas City and A. E. Spelman, Smithville, attended the Sunday session. Mrs. W. E. Martin, Odessa, attended the Saturday session.

WOMAN'S AUXILIARY

Mrs. Martin called attention to the Woman's Auxiliary being one of the most restrictive women's organizations. She thanked the Council and the headquarters office for assistance given the Auxiliary. She reported that they had eight student loan funds out, totalling $6,000. She reviewed some of the work of the Auxiliary.

ADVISORS TO PRACTICAL NURSES

A letter was presented from the Licensed Practical Nurses' Association asking for advisors in St. Joseph, Farmington, Cape Girardeau and Sedalia. It was suggested that Councilors from these districts make appointments.

PHYSIOTHERAPY ADVISOR

A request to Mr. O'Brien to serve on an advisory committee for the eastern division of the Physiotherapy Society was presented. After discussion, on motion of Dr. Muether, it was voted that Mr. O'Brien be instructed to write that the Council of the Association suggested that he not accept the advisory position but that the chairman or a member of the Committee on Physical Medicine be appointed in this capacity, and that if this is not satisfactory to the group, they again contact Mr. O'Brien.

STUDENT LOAN FUND

Dr. Petersen said that he had been asked to name two members as advisors on the Woman's Auxiliary Student Loan Fund and that he had named J. W. Allee, M.D., Columbia, and J. W. Thompson, M.D., St. Louis.

INVITATION TO A.M.A.

A request from the Convention Bureau to invite the A.M.A. to hold its 1958 Interim Session in St. Louis was presented and on motion of Dr. Dowell, it was voted to extend this invitation.

TREASURER'S REPORT

Dr. Vohs gave the Treasurer's report and said that the Association was functioning within its budget.

BUDGET COMMITTEE

Dr. Sewell appointed the following Budget Committee: Drs. Vohs, Chairman; Bohrer, Francka, Buhler, Sewell.

CARE OF THE PATIENT

A progress report of the Joint Conference for the Improvement of the Care of the Patient was accepted by the Council.

FEDERAL LEGISLATION

Final action of the Congress on some legislation influencing physicians was reviewed. Attention was called to the final exclusion from Social Security of physicians, dentists, osteopaths, lawyers and some other groups. It was pointed out that the waiver of premium clause in permanent and total disability was adopted though opposed by the medical profession. On the President's reinsurance bill, it was pointed out that the A.M.A. opposed this as being unnecessary in view of the many private insurance firms in the reinsurance field. The President stated recently in Denver that the reinsurance bill will be introduced again next year. The Hill-Burton plan was continued and about $1,850,000 would be available to Missouri; Missouri will also share in a fund for chronic hospital, rehabilitation centers, diagnostic centers and nursing centers, this measure being restrictive to such use.

HOSPITAL LICENSING LAW

Dr. Petersen said that there had been two meetings to study the implementation of the hospital licensing law passed by the 1953 Legislature and that work was still in progress on this.

RESIGNATION OF EDITOR

The Chairman announced that Dr. Williams had resigned as Editor, effective December 31, 1954. He appointed the following committee to study appointment of a new editor: Drs. Francka, Petersen, Muether, with Dr. Sewell ex-officio. He asked the committee to meet on adjournment of the Council.

A.M.A. SESSION

Mr. O'Brien gave a brief summary of the A.M.A. Annual Session, pointing out that the main discussions were on fee splitting, osteopathy, care of veterans, foreign medical school graduates, closed panel plans, joint accreditation.

LEGISLATIVE ACT ON LICENSURE

Mr. Smith presented a tentative draft of a proposed bill for the purpose of establishing one licensing board of the healing arts. The bill was gone over section by section and some changes were made. It was stated that the Council would receive revised copies and that the bill would be studied also by the Committee on Public Relations.

DIVISION OF HEALTH

Dr. Amos reviewed some of the work of the Division of Health, calling special attention to the changes to be made in vital statistic reporting, a new Bureau of Hospitals, Hill-Burton funds, civil defense, hotel licensing, stream pollution, narcotic law, and said that the Committee on Laboratory Medicine and Infant and Child Health had been most helpful to him. He asked that the Committee on Conservation of Eyesight study the trachoma situation. This was done on motion of Dr. Buhler, with the suggestion that Dr. Amos meet with the committee.

SELECTIVE SERVICE ADVISORY COMMITTEE

Dr. Allen reviewed the establishment and work of the Advisory Committee. He said that after July 1955 doctors will come under the regular draft. He said that 1,250 doctors will be needed by the armed services between January and July of next year. He said that there were still in Missouri 15 to 20 men who had received their education under government subsidy, are in priority 1 and 2, and who have been deferred and that he believed that now all priority 1 and 2 men should be made available. On motion of Dr. Buhler, this was approved.

REPORT OF COMMITTEE ON EDITOR

Dr. Francka reported for the committee appointed to study the editorship: 1. The Executive Secretary be instructed to write Dr. Williams accepting his resignation and thanking him for his services. 2. That the appointed committee be in charge of the publication for the time being. 3. That the Council empower the committee to appoint an editor after further study. On motion of Dr. Vohs, the report was accepted.

REPORT OF FIELD SECRETARY

Mr. McIntyre said that the Association exhibit at the state fair on "Your Heart" had been successful, that the attendance at the fair was 500,000. He reviewed meetings that had been held since the first of September, all showing good attendance. He called attention to a Southeast Missouri Cancer Conference to be held in Cape Girardeau on September 30; the Kansas City Southwest Clinical Society Conference October 4 to 7; meeting of the Medical Secretaries and Assistants in Jefferson City on October 10, at which Dr. Petersen will speak; Missouri Health Council meeting in Columbia October 11; Missouri Academy of General Practice in Jefferson City October 27 and 28; Clay County celebration of its 100th anniversary on November 4; the Southern Medical Association meeting in St. Louis November 8 to 11. He said that 37 physicians had located in towns of less than 10,000 since the first of the year. He reviewed the hospitals or additions recently completed and plans for future construction of hospitals. He told of a conference held by representatives of the Committee on Infant and Child Health with representatives of organizations interested in the health of the school child. He said that the conference agreed upon the following: 1. Certain School Health Policies as suggested by the National Committee on School Health Policies. 2. To seek opportunity to appear before the Missouri Association of school administrators to discuss the services that member organizations of the Conference have to offer schools in relation to these policies.

RESOLUTIONS ON BLUE CROSS

Resolutions from the Buchanan and Grand River Medical Societies opposing Blue Cross paying osteopathic hospitals were presented. This was discussed by most of the Council, it being brought out that the Council could not control this, that it was also a national problem and an economic one as Blue Cross was in a competitive field with commercial insurance companies. It was decided that the only power the Council had in the situation was to refer the resolutions to the boards of Blue Cross and Blue Shield.

PATHOLOGY AS PRACTICE OF MEDICINE

Legal advice was sought by the Council.

Dr. Buhler presented a letter written to Dr. Allen concerning the Iowa Hospital Association contending that all of pathology is not the practice of medicine, that it is in two divisions, professional and technical service. The letter suggested that the Board of Trustees of the A.M.A. would welcome opinions on this and on motion of Dr. Buhler it was voted that a letter in response to the situation in Iowa go to Dr. Lull, opposing the division of the practice of pathology into two divisions.

AMERICAN COLLEGE OF PATHOLOGY FILM

Dr. Buhler asked approval of a film on careers in pathologic work for girls which the American College of Pathology has developed and said that several had seen and approved the film. On motion to Dr. Dowell, the film was approved.

CONFIDENCE VOTE TO B.C. AND B.S.

On motion of Dr. Bull, it was voted that the Council give a vote of confidence to the Boards of Trustees of the Blue Cross and Blue Shield on handling their present problems to their best discretion.

BLUE CROSS AND BLUE SHIELD

Dr. Feierabend reviewed some of the problems facing the prepayment plans at present, pointing out that they are in an untenable position with the public in some respects, that they are limited in their competition with commercial companies. Following discussion, it was stated that any changes in plans should be made known to the Council prior to the change and that any change would be made in both the state and Kansas City plans at the same time.

RURAL HEALTH

Dr. Spelman reviewed the work of the Committee on Rural Health, pointing out its assistance in publicity of a course in industrial medicine at Kansas University on December 6, 7 and 8; the recognition that a committee may be needed for accumulating information on insurance; further publicizing rural practice to interns; the need of a member on the state committee on brucellosis; that future changes in prepayment plans should be in the hands of the boards of Blue Cross and Blue Shield; the readiness of the committee to assist the University of Missouri in education for rural practice; the present status of the survey of indigent care and the need of the survey committee of $3,000 to complete its work. On motion of Dr. Vohs, the report was accepted and the request for funds was referred to the Budget Committee.

MEDICAL SECRETARIES

A letter asking approval of the Missouri Society of Medical Secretaries and Assistants was presented.

On motion of Dr. Buhler, it was voted that the constitution of the organization be studied by the Committee on Public Relations.

LEGISLATION

It was suggested that each Councilor consider the handling of the proposed bill to be introduced in the Legislature and write his ideas to the Executive Secretary.

Meeting of November 6, 7

The Council met at the Sheraton Hotel, St. Louis, November 6, 7, 1954, with W. S. Sewell, M.D., Springfield, Chairman, presiding. Present were Drs. Sewell; W. F. Francka, Hannibal; R. O. Muether, St. Louis; Otto W. Koch, Clayton; J. L. Washburn, Versailles; C. G. Stauffacher, Sedalia; Richard H. Kiene, Kansas City; J. H. Summers, Lebanon; Ben M. Bull, Ironton; H. E. Petersen, St. Joseph; Carl F. Vohs, St. Louis; Victor B. Buhler, Kansas City; E. R. Bohrer, Jefferson City; A. S. Bristow, Princeton; Henry Allen, St. Louis; Harry Klein, Duff S. Allen and Mr. John A. Hailey, of the State Board of Medical Examiners; Jasper Smith, Springfield; Lemoine Skinner, St. Louis; John Buckner, Springfield; Ray McIntyre and T. R. O'Brien, St. Louis.

PATHOLOGY AS PRACTICE OF MEDICINE

It was reported that the letter to Dr. Lull, instructed to be written at the last Council meeting concerning the Iowa Hospital Association contending that all pathology is not the practice of medicine, and a letter in reply stating that it would be referred to the proper Council of the A.M.A.

PHYSIOTHERAPY ADVISOR

Mr. O'Brien reported that the Physiotherapy Society again invited him to serve on its Advisory Committee and that he accepted the invitation.

A.M.A. SESSION

Dr. Bristow reported briefly on the San Francisco A.M.A. session saying that it was a session with no positive actions taken.

PROPOSED LICENSURE BILL

Dr. Sewell announced that a committee from the Board of Medical Examiners had been invited to meet with the Council for the purpose of studying the proposed licensure bill. The draft of the bill as of this date was gone over and discussed, several changes being agreed upon with one section dealing with the board and especially reciprocity being referred to the attorneys and the members of the Board for further study and rewriting. Changes in the present draft of the bill were made upon motions duly voted upon and will be reflected in revised copies of the draft.

DOCTOR DRAFT

Dr. Allen said there was some indication that extension of the Doctor Draft Act would be asked. He pointed out that local committees must coordinate with the state and that local committee recommendations were not always followed because of this.

CARDIAC COMMITTEE

Report of the Committee on Study of Cardiac Diseases was presented, the principal points being, the correlation of programs through the Association office was stressed; the grant making possible programs through St. Louis University; attention called to meeting of the Association in Camdenton; approval of the program "Heart in the Home" in which heart patients referred by physicians are instructed in home activities; the value of the "Heart Bulletin" on which there will be a survey. On motion of Dr. Buhler, seconded by Dr. Petersen, the report was approved.

CONSERVATION OF EYESIGHT

Report of the Committee on Conservation of Eyesight was presented which stressed the importance of screen tests for vision of school children and proposed invitation that the National Society for the Prevention of Blindness conduct a state wide testing; that "based on a study made in St. Louis, work by the National Society for the Prevention of Blindness and personal experience of ophthalmologists in the state, all of which pointed up inaccuracies in sight screening by commercial apparatus, the Committee recommends that commercial apparatus not be used and that the Snellen eye chart is the preferable method of sight screening."

Delegates from even numbered districts held meetings during the session.

The Committee further recommended "that based on studies by the Association in 1952 of the incidence of trachoma in the state, surveys by Drs. Brailey and Thygeson, an epidemiological study made by Dr. Cady of the USPHS and other independent reports by ophthalmologists in Missouri which indicated that the eye disease, trachoma, as a potential cause of preventable blindness is no longer a public health problem in Missouri, new cases being exceedingly rare and modern therapeutic measures having reduced the problem to one of minor importance, the Committee recommends that the Division of Health set a definite date in the near future when the Trachoma Hospital at Rolla will no longer accept patients for hospital care; that the outpatient clinic be continued for approximately one year after the closing of the hospital, and that the field clinics of the Trachoma Hospital staff be discontinued effective June 1, 1955; that the legislature of Missouri be advised and that appropriations of the General Assembly for the biennium, 1955-1957, reflect this recommendation. On motion of Dr. Buhler, duly seconded, the report was accepted with the instruction that the information be made available to the State Health Commissioner.

TREASURER'S REPORT

Dr. Vohs reported on the present balances of the Association and the outlook for the year, saying that probably there would be a small excess of income over expenses.

BUDGET

Dr. Vohs, chairman of the Budget Committee, presented the following budget for 1955:

Budget for 1955

Salaries	$ 40,500.00
Journal Expense	28,500.00
Postage, Printing & Stationery	5,000.00
Travel: Executive Secretary	1,300.00
Travel: Field Secretary	2,800.00
Telephone & Telegraph	1,600.00
Office Rent & Light	3,000.00
Meetings, Committee Expenses	20,800.00
Defense	500.00
Scientific & Postgraduate Work	1,000.00
Woman's Auxiliary	1,200.00
Public Relations	7,500.00
Insurance Annuity	2,780.00
Miscellaneous General Expense	2,500.00
Furniture & Fixtures	1,000.00
Social Security Tax	500.00
Legal Expense	2,000.00
	$122,480.00

DEFICIT BUDGET

It was pointed out that it was a deficit budget and that thought should be given to presenting this fact to the House of Delegates at the 1955 Session.

A.M.A. DELEGATES

At the suggestion of the Budget Committee, it was moved, seconded and voted that the Council recommend to the House of Delegates that after January 1, 1956, the expenses of alternate delegates to the A.M.A. not be paid unless they were serving in the place of a delegate; that the actual expenses of delegates be paid. This action is necessary because of the fact that the A.M.A. now meets twice yearly in far removed sections of the country and the actual expenses are much greater than in former years.

INDIGENT CARE SURVEY

It was moved, seconded and voted that $500 be given the Missouri Health Council to aid in completing the State Indigent Care Survey.

COUNCILOR LETTERS

The Councilor letters were discussed and on vote, it was decided that these be discontinued.

INSURANCE REVIEW

It was suggested that the retirement insurance program for employees needed study and on motion it was voted that a committee be appointed to conduct this study. The Chairman appointed the members of the Budget Committee as this committee.

FIELD SECRETARY'S REPORT

Mr. McIntyre reviewed meetings that had been held since the last Council meeting, reviewed meetings and programs that will be held during the remainder of November and December and told of study of locations for physicians. He told of one town which has offered to build both home and clinic for a physician who would locate there.

LICENSURE ACT

The final draft of the new licensure bill, including the phase on reciprocity delayed for further consideration earlier in the day with the members of the Board of Medical Examiners, was presented, and on motion, duly seconded, was passed unanimously.

PUBLIC POLICY AND PUBLIC RELATIONS REPORT

The following from the report of the Committee on Public Policy and Public Relations was presented: The Committee recommends to the Council, with possible change in timing, that during the month of November preparatory statements and copies of the bill be disseminated to members of the Committee on Public Policy and Public Relations, who in conjunction with Councilors, contact county societies and discuss principles; that about the 1st of December the bill with explanation appear in the Journal and that the Osteopathic Association be given a copy of the bill with all information. It was suggested that a Secretary's Letter go to all members giving information on the bill and that this letter also go to all osteopaths in the state.

Dr. Jarvis welcomed guests at the banquet.

ACTION

A special committee was appointed to consider the report of the Committee on Public Policy and Public Relations because of differing views on the timing as outlined in the report of the Committee. The Committee was unable to agree and so reported to the Council. On vote, it was passed with minority dissenting votes, that the outline presented in the report of the Committe on Public Policy and Public Relations be followed.

BLUE CROSS AND BLUE SHIELD

The dissatisfaction of two county medical societies on the action of the Council concerning Blue Cross was discussed. It was reported that those societies may have special meetings in the near future to discuss present Blue Cross-Blue Shield policies.

ALCOHOLISM

A preliminary report of the Committee on Alcoholism was presented with the information that the Council would be asked to assist in legislation for a Commission on Alcoholism at a later time; that the Committee was conferring with the Committee on Mental Health.

MEDICAL SECRETARIES

The recommendation of the Committee on Public Policy and Public Relations that the Missouri State Medical Secretaries and Assistants be requested to change the name to Medical Secretaries and Assistants of Missouri because of confusion of the present name with Missouri State Medical Association and Missouri Medical Service, and that the organization be approved, on vote was approved.

Meeting of January 22

The Council met at the Sheraton Hotel, St. Louis, on January 22, with W. S. Sewell, M.D., Springfield, Chairman, presiding. Those present were Drs. Donald M. Dowell, Chillicothe; W. F. Francka, Hannibal; Otto W. Koch, Clayton; J. Loren Washburn, Versailles; C. G. Stauffacher, Sedalia; Richard H. Kiene, Kansas City; Ben M. Bull, Ironton; H. E. Petersen, St. Joseph; Victor B. Buhler, Kansas City; E. Royse Bohrer, Jefferson City; Carl F. Vohs, St. Louis; Messrs. Jasper Smith, Springfield; John W. Noble and Lawrence Bradley, Kennett; John Buckner, Springfield; Lemoine Skinner, Ed Schneider, Ray McIntyre, T. R. O'Brien, Helen Penn, St. Louis.

PUBLIC RELATIONS ON LICENSURE BILL

Mr. Skinner reviewed the public relations work on the licensure bill beginning with the approving of the bill at the September Council meeting, the referral to the Public Relations Committee for handling and the report of that Committee to the Council on November 7, with the steps taken beginning December 11 with the release of the bill and the fact sheet to all members of the M.S.M.A., practicing osteopaths, members of the General Assembly and to newspapers.

TREASURER'S REPORT

Dr. Vohs gave the following report: "The auditors have completed their annual check of our accounts. The final statement is not in our hands, however, I am informed that our expenses exceeded receipts in the amount of $609.00. This included a bad debt for journal advertising which we charged off in the amount of $340.00.

"You will recall that in December 1953, when our budget for 1954 was approved, we pointed out that our estimated budget exceeded estimated receipts by approximately $2,500.00. During the year our journal advertising increased and correspondingly our receipts increased. That is the main reason why our actual deficit is so small. In addition, we paid every bill we possibly could during the month of December, including attorneys to date, printing charges covering pamphlets for our joint licensure bill, delegates expenses to the A.M.A. meeting in Miami.

"We did this because we knew we had a black figure for the year and thought it preferable to pay these bills immediately rather than holding over until January when they would be charged to 1955 operations.

"You will recall that our estimated budget for 1955, approved by you last November, exceeded expected income by about $12,000.00, and we are hopeful that our actions in paying our bills during 1954 and charging to operations in 1954 will help us to reduce our heavy anticipated deficit in 1955.

Auxiliary President and MSMA President were seated at same table at Auxiliary's dinner on Sunday evening.

METICORTEN
PREDNISONE
Schering
SCHERING

in rheumatoid arthritis
more potent
than other corticosteroids
lessened incidence
of sodium retention
and potassium depletion

*T.M.
METICORTEN,* brand of prednisone.

"I wish to again point out to you that we are operating on a deficit basis, while small, and that consideration will have to be given soon to correct the situation.

"Our cash position as of Dec. 31, 1954, is $24,079.90, with bonds amounting to $55,000.00."

On motion of Dr. Buhler, the report was approved.

LICENSURE BILL

Mr. Smith presented the following changes, which were approved individually.

Section 2, paragraph 1, was amended to include the word "actively" before the word "engaged" in qualifications of board members. In Section 13, members of the U.S.P.H.S. were included in the exclusions of applications; and the words "cure or" were inserted prior to "prevent" in the reference to Christian Science practitioners. In Section 4, the word "like" was deleted before the word "Boards" dealing with reciprocity, and the word "licensing" was inserted in lieu thereof. In Section 3, paragraph 6, the words "approved by the board" in line 9, dealing with accredited schools were deleted.

The last sentence of Section 2, paragraph 2, dealing with quorum of the board was changed to read: "Four members of the board shall constitute a quorum, at least one of whom shall be a graduate of a professional school approved and accredited as reputable by the American Osteopathic Association."

Section 3, paragraph 1, was changed to add at the beginning of the first sentence, the words, "Except as provided in Paragraph 1 of Section 22 of this Act."

Section 3, paragraph 5, was amended by the addition of the following: "Examinations on each subject shall consist of not less than five questions, each question to have equal weight and equal grade value."

Section 3, paragraph 6, was changed to read: "Candidates for licensure as physicians and surgeons shall be citizens of the United States and shall furnish satisfactory evidence of their good moral character, and their preliminary qualifications, to wit: A certificate of graduation from an accredited high school or its equivalent, and satisfactory evidence of completion of preprofessional education consisting of a minimum of sixty semester hours of college credits in acceptable subjects leading toward the degree of Bachelor of Arts or Bachelor of Science from an accredited college or university. They shall also furnish satisfactory evidence of having attended throughout at least four terms of thirty-two weeks of actual instruction in each term and of having received a diploma from some medical college or osteopathic college approved by the board as reputable that enforces requirements of four terms of thirty-two weeks of actual instruction in each term, including, in addition to class work, such experience in operative and hospital work during the last two years of instruction as is required by the American Medical Association and the American Osteopathic Association before the college is approved and accredited as reputable. Any medical college approved and accredited as reputable by the American Medical Association and any osteopathic college approved and accredited as reputable by the American Osteopathic Association is deemed to have complied with the requirements of this paragraph."

Section 3, paragraph 7, was changed by the addition of the following words: "or the National Board of Osteopathic Examiners, chartered under the laws of the State of Indiana, . . ."

Section 7, paragraph 1, was amended by the inclusion of the following words at the end of the first clause: "and upon submission of evidence satisfactory to the board that the applicant in the year preceding the application for renewal attended at least two days of an educational program or its equivalent approved by the board, . . ."

Section 10, paragraph 1, was rewritten to read as follows: "The board may refuse to license individuals of bad moral character, or persons guilty of unprofessional or dishonorable conduct, and it may, on its own information or complaint of any person, revoke or suspend licenses, or other rights to practice, however derived, for like causes; and in cases in which the license has been granted upon false and fraudulent statements, after giving the accused an opportunity to be heard in his defense before the board. Without limiting the general language in this paragraph, violation of the Code of Professional Conduct, habitual drunkenness, drug habit or excessive use of narcotics, producing criminal abortion, soliciting patronage in person or by agents, under his own name or under the name of another person or concern, actual or pretended, the use of his name under the designation of 'Doctor,' 'Dr.,' 'M.D.,' or 'D.O.,' or any similar designation with reference to the commercial exploitation of any goods, wares or merchandise, or by dividing or agreeing to divide any fee or compensation received or charged for services rendered by him with any person as compensation to such person for sending or bringing or recommending or being instrumental in any manner in causing any person to engage him for examination or treatment, shall be deemed unprofessional and dishonorable conduct within the meaning of this section."

Section 10, paragraph 2, was changed by the addition of the following at the end of the paragraph: "Before a license is revoked, there shall be included in the majority of the board voting for the revocation, the vote of at least one board member who is a graduate of a professional school approved and accredited as reputable by the Association which has approved and accredited as reputable the professional school from which the licentiate himself graduated.

Section 14 was amended by the following words inserted at the opening of the section: "Except as provided in the last sentence of paragraph 6 of Section 3, . . ."

COMMITTEE FOR CONFERENCE

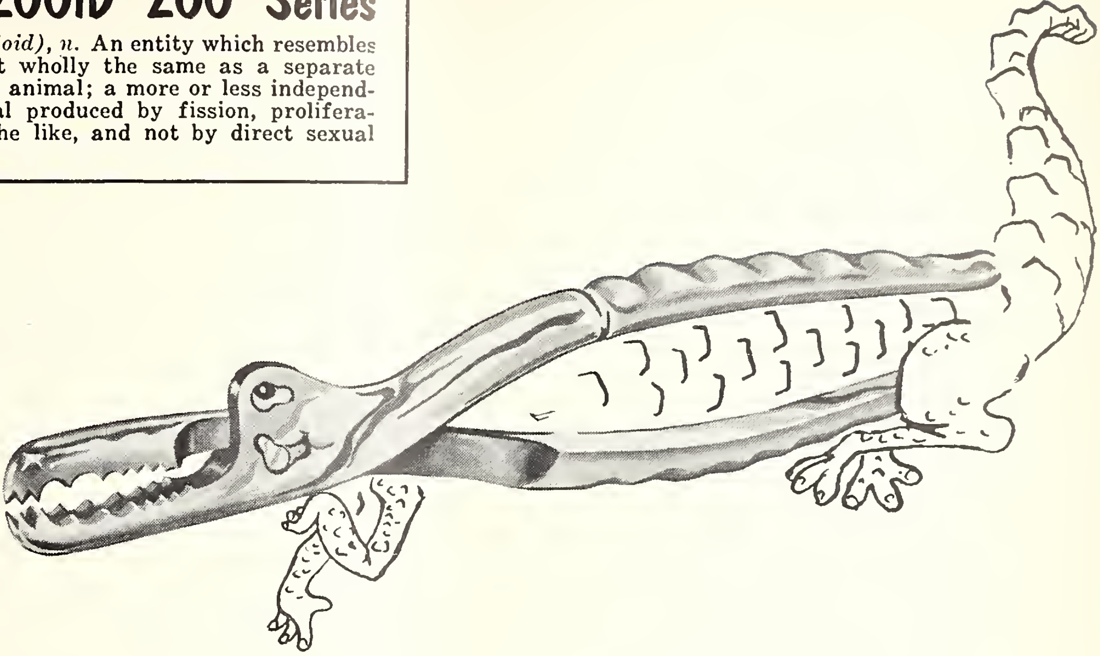
Letters were received from the Missouri Osteopathic Association suggesting that a meeting be held with representatives of M.S.M.A. to discuss changes in the proposed licensure law and including an outline of recommended changes.

Dr. Sewell suggested the following committee, which was approved, for the scheduled meeting with representatives of the osteopathic association on January 23: Drs. Petersen, Buhler, Bohrer, Vohs, Sewell and Jerome I. Simon.

The Presidents-elect of Auxiliary and MSMA were seated at adjoining table at Auxiliary dinner.

The ZOOID ZOO Series

zo'oid *(zō'oid)*, *n.* An entity which resembles but is not wholly the same as a separate individual animal; a more or less independent animal produced by fission, proliferation, or the like, and not by direct sexual methods.



BONE CLUTCHING CROCODILE

(Maxilla Maximus)

A FIRM HOLD is necessary . . . whether on a bone or a budget. And keeping the family budget in line nowadays is no easy job.

Unexpected illness can cause a disastrous drain on finances . . . pile up hospital and doctor bills. To meet this situation, the only sensible answer is to have the best possible prepaid protection.

The answer lies in BLUE CROSS and BLUE SHIELD—that partnership of doctors, hospitals, and the public that leads the field today in hospitalization and surgical-medical coverage.

Benefits in terms of service, not dollars, protect against increasing hospital costs in Blue Cross . . . and Blue Shield provides liberal allowances for professional service of physicians. Non-profit operation cuts overhead costs to an almost unbelievable low . . . returning all but a few cents of the membership dollar in benefits. And ease and simplicity of handling assure a minimum of trouble for both doctor and patient.

You can prescribe for an ailing budget with the assurance that your patient is getting the best possible protection when you recommend BLUE CROSS and BLUE SHIELD.

BLUE CROSS
BLUE SHIELD

A HOSPITAL-MEDICAL-SURGICAL PLAN SPONSORED BY DOCTORS

KANSAS CITY
SAINT LOUIS

STATE LEGISLATION

Mr. O'Brien called attention to S.B.'s 59, 60, 61 and 62 dealing with mental health. He said that the Committee on Mental Health had met but without a quorum and would meet again on February 6 to make recommendations on the pending bills. Washington News Letter of January 14 was called to the attention of the Council as outlining legislation before Congress.

The Committee on Mental Health worked over problems in its field.

HYPHENATION

Mr. McIntyre presented the request of McDonald County to hyphenate with the Ozarks Medical Society. On motion of Dr. Bohrer, this was approved. Several other possible hyphenations that may be requested were pointed out by Mr. McIntyre.

CIVIL DEFENSE

Letters from Dr. Hungate to the State Director of Civil Defense and to the Association concerning work and bills that had not been paid were presented. It was suggested that Mr. O'Brien talk to Dr. Amos and see if better understanding with the state office could be obtained.

INFANTILE PARALYSIS

A letter from the National Infantile Paralysis Foundation outlining procedures to be used in regard to the Salk vaccine, should it be approved, was presented, together with a letter from Dr. Amos outlining work in this state and requesting an advisory committee. On motion of Dr. Buhler, it was decided that this should be referred to the Committee on Infant and Child Care and that Dr. Amos be so notified.

DEAN OF UNIVERSITY OF MISSOURI

It was suggested that the Dean of the School of Medicine of the University of Missouri be invited to attend a Council meeting and outline some of the plans for the school and the general hospital. It was announced that Dr. Thomas Alphin had been appointed assistant dean. On motion of Dr. Washburn, it was voted to invite Dr. Pullen to the next meeting of the Council.

SALARY OF DIRECTOR OF HEALTH

A letter from the staff of the Division of Health concerning the possibility of increasing the salary of the Director was presented and discussed but no action was taken.

NEXT MEETING

Drs. Buhler and Kiene suggested that the next meeting of the Council be held in Kansas City. It was decided to leave the decision to the chairman and executive secretary.

W. S. Sewell, Chairman.

Supplemental Council Report

Dr. Sewell: Mr. Speaker, Members of the House of Delegates, the report of the Council, as printed in the booklet Report of Officers and Committees, summarizes the activities of the Council up to the date of the last meeting, which was held in St. Louis, March 13. At that time a number of important matters were considered and reports of several standing committees were received.

As most of these committee reports do not appear in the printed booklet, I wish at this time to submit the substance of each briefly to the House so the Speaker may refer them to an appropriate reference committee without the loss of time that would be involved if each report were to be read in full. I shall then present to you an important recommendation of the Council in regard to legislation on licensure.

The report of the Committee on Cancer advocated steps sponsored by the American Cancer Society to make the doctor's office the core of the cancer detection program. A proposed form to be used by physicians in this connection was presented. The report of the committee will be found on pages 9, 10, 11 and 12 of the booklet, Reports of Officers.

The following matters were included in the report of the Committee on Mental Health:

1. The Council accepted a recommendation that the membership of the committee be enlarged to include physicians other than psychiatrists. This proposal is to be referred to the Reference Committee on Constitution and By-Laws.

2. The committee recommended general approval of Senate Bills 59, 60, 61 and 62 relating to the State Division of Mental Health. On several points, minority and majority reports of the committee differed as to desirable amendments. These differences, involving S.B. 59 and 60, particularly one relating to reports the director of the division might require from hospitals, were considered and resolved by the Council.

Fifty year men posed for picture preceding banquet.

The Council received a report of contributions during the past year to the American Medical Education Foundation from doctors in Missouri. The total was only $5000, and only 157 doctors contributed. Making due allowance for additional contributions by Missouri doctors direct to medical schools in our state, the showing is still far from satisfactory and still below the performance of other states.

The Committee on Venereal Disease reported its compliance with a recommendation of the Council that it meet with the Committee on Laboratory Medicine and work out a system of morbidity reports on venereal disease. A reporting card for this purpose is now in the hands of the Division of Health. The Council approved the committee report.

The Committee on Physical Medicine recommended a change in MSMA by-laws to create a standing committee on rehabilitation. The committee reviewed the recent functioning of the Section of Vocational Rehabilitation of the State Department of Education and made recommendations for improving the effectiveness of medical consultants and for reinstating the professional advisory committee called for by the state plan for administration of the program. If these steps are taken, the committee recommended Association support for increased appropriations for the Section on Vocational Rehabilitation and endorsement of the principles of House Bill 202 which would assign responsibility for disability evaluation to the section. The Council approved the report.

Two sons assist in presenting 50 year pin to Dr. D. I. L. Seabaugh.

The Committee on Infant Care recommended approval of the 1955 spring Salk polio vaccine program if the vaccine is officially approved by the United States Public Health Service. It is contemplated the program will be administered at the county level by a designated individual physician. In counties in which there is no physician the Missouri Division of Health will direct the program, and in counties having a full-time health officer, such officer will be in charge. It was further reported that the committee, after an approval poll of members of the Association's Maternal Welfare Committee, recommended to the Missouri Division of Health that "an ointment containing 100,000 units of penicillin per gram, or erythromycin ophthalmic ointment, with expiration date observed in either case, be permitted in lieu of silver nitrate in the eyes of the newborn on the request of the medical staff of the hospital to the State Division of Health." The report of the committee was approved.

The Committee on Alcoholism reported on a questionnaire survey and indicated possibilities for effective work in this field. Attenton was called to the resolution for a joint legislative study committee.

The Council approved a request made jointly by the Phelps-Crawford-Dent-Pulaski-Maries County Medical Society and the Laclede County Medical Society that the two organizations be hyphenated and take the name, Mid-Missouri Medical Society.

It is with regret that the Council presents the following resolution:

WHEREAS, Presidents of the Association are elected by the

Upjohn
KALAMAZOO

Indicated wherever oral
cortisone or hydrocortisone
is effective Available in 5 mg.
tablets in bottles of 30 and 100
Usual dosage is ½ to 1 tablet three or
four times daily

Deltasone*

Less edema retention, less potassium depletion

*Trademark for the Upjohn brand of prednisone (delta-l-cortisone)

House of Delegates because they are esteemed by the membership, and

WHEREAS, Presidents who have served and remained interested in the affairs of the Association have contributed much to the thinking of the House of Delegates, and

WHEREAS, They have been of invaluable assistance to officers, personnel and the membership, and

WHEREAS, When Past Presidents are removed by death and their guidance and friendship is lost, it is felt deeply by the House of Delegates, therefore be it

Resolved, That the House of Delegates of the 97th Annual Session expresses its grief and feeling of loss in the deaths during the last year of three of its Past Presidents, Robert E. Schlueter, St. Louis; Tolman W. Cotton, Van Buren, and A. W. McAlester, Jr., Kansas City, and be it further

Resolved, That this resolution become a part of the proceedings of this 97th Annual Session.

I come now to the important question of MSMA policy in regard to the goals we sought to achieve in Senate Bill 226. Dr. Petersen and Dr. Buhler have discussed this matter in some detail, and I shall not review it at any length. The plain fact appears to be that the measure, as we proposed it, is not acceptable to the Legislature at this time. It should be remembered, however, that the basic principles embodied in the Bill are the result of two years of intense work by the Council, officers, staff and committees of the Association, and they represent, in the Council's view, a correct and fundamental basis for solving a basic problem confronting the people of Missouri. In its simplest essence, the problem is this: How may we provide some effective assurance to the people that persons licensed by the state to set themselves up as doctors have at least minimum qualifications by standards of Twentieth Century medical science? This question may be stated another way, as follows: How are we to see to it that, once and for all, we provide for the people of Missouri a safeguard against the growth of present cultist groups and the development of new ones?

The Council recognizes that these are not easy questions to get answered. If they were, they would not have plagued the medical profession and the people of our state for so many generations. At the same time, the Council feels MSMA has come far in the last two years in defining the basic principles that must underlie any final solution to the problem. There is, we are confident, some way of finding the solution we seek without sacrificing these principles.

We have had a set-back in the great undertaking we began two years ago. The solution we proposed to the Legislature has not been accepted. We do not advocate that anything further be done to press our proposal—or to modify it at this time.

We do ask the House of Delegates, however, to direct the Council to continue its study and its work on the problem during the coming year and to bring back to the House another proposal for its solution. What the elements of such a proposed solution may be the Council is not in a position to know at this time. We do believe, however, we are basically on the right track. Our job is to find a way of achieving our goal that will—on the one hand—preserve the basic principles of scientific integrity and—on the other—will be practically and politically feasible.

It is the judgment of the Council that we have not yet come near exhausting all the possibilities for an acceptable solution. The Council respectfully requests the authorization of this House to study the matter further and to report to the next annual session the detailed elements of a recommended continuing program aimed at carrying out the policy voted without dissent by the House at its session a year ago.

Dr. Sewell gave a brief survey of bills in the legislature.

The Speaker referred the resolution in the supplementary report to the Reference Committee on Resolutions and the remainder of the report to the Reference Committee on Reports of Officers.

H. E. Petersen, M.D., St. Joseph, President, announced the appointment of the Committee on Nominations as follows:

Committee on Nominations

Robert B. Bristow, M.D., St. Joseph.
B. L. Murphy, M.D., Hannibal.
Daniel L. Sexton, M.D., St. Louis.
Martyn Schatyn, M.D., Clayton.
W. L. Allee, M.D., Eldon, Chairman.
G. A. Aiken, M.D., Marshall.
Edward H. Klein, M.D., Kansas City.
Robert E. Breuer, M.D., Newburg.
Paul Baldwin, M.D., Kennett.

There being no unfinished business and no new business introduced, the House of Delegates recessed at 3:15 p. m. until Monday, March 28, at 4:00 p. m.

MONDAY, MARCH 28, 1955

The House of Delegates convened at 4:00 p. m., in the Little Theater, Municipal Auditorium, with Joseph L. Fisher, M.D., Vice Speaker, presiding.

Walter Baumgarten, M.D., St. Louis, reported for the Committee on Credentials.

The Speaker introduced Thomas H. Alphin, M.D., Associate Professor of Anatomy and Assistant Dean of the University of Missouri.

DR. ALPHIN: I have not much to say, except I am here. Before I was here I did a little work in Washington for a trade association called the American Medical Association, in the Washington office. Before that, I was with the Federal Civil Defense Administration and before that I was Assistant Chief Medical Examiner for the Commonwealth of Virginia. I spent many happy years teaching medicine, before those days, at the University of Virginia. I am awfully glad to have a chance to do it again. There is something very satisfactory about dealing with the kind of young men who want to go to medical school. I think here in Missouri it is going to be possible for the very best young men to get a good medical education. I am awfully proud to be in a small way helping them do that. Thank you.

Elmer Hess, M.D., President-elect of A. M. A., gave the banquet address.

The Speaker introduced Elmer Hess, M.D., Erie, Pennsylvania, President-Elect of the American Medical Association.

DR. HESS: It is a real pleasure for me to be here with you. I have been here before, in this room. It has always been a pleasure for me to come to Missouri. I thought as I sat here and watched you men do the business of this great Association, how much the whole profession depends upon you, and I noted that a legislative matter which you have been intensely interested in has been lost in committee. I think you know about the legislation that I have reference to.

It just occurs to me that it might be a good thing to say a few words about medical politicians, because that is what you are labeled by the boys back home. I can remember a few years ago I gave a talk before the North Carolina Medical Society, and I heard a great deal of criticism about the men who were running the show down there being the same old fellows elected year after year and year after year, and they wished they would get some new faces. I would like to tell you something that is very interesting. How many men do you believe there are in these great United States with more than 200,000 physicians to whom one can put in a telephone call, assign them a job and have it done? Well, it is less than 3,000.

When you go to your county medical society meeting, you complain about the little clique that is running the show. Well, the only reason the little clique is running the show is because you do not have the intestinal fortitude to go in and put up some candidates of your own and elect them. If they are not running your county medical society the way you think it ought to be run, it is your duty to get some new candidates and new blood in the county level and see that they do something. One of the ways to do it, when you are officers of the medical societies, is to assign jobs to a lot of fellows in the organization who feel that they cannot do anything and nobody ever asks them to do anything, and they do not ask to do anything. Doctors are the most independent people in the world. You can make them do things by giving them jobs and then prodding them until they do do it, and every once in a while you will find two or three good men who sat on the sidelines and fussed an awful lot about the fellows who are running the show, but who have never had the intestinal fortitude themselves to get into the battle and help run the show.

Dr. Hess also was on panel for a round table luncheon.

You see those same faces when you get up to the state medical society meetings, the same old faces. The only reason you see them is because the fellows back home are more or less indifferent. You go to the A. M. A. and you see the same thing. There are just a few men who take and shoulder the responsibilities of the political society matters. Gentlemen, I want to tell you that unless you take your responsibilities seriously, unless you make up your mind you are going to be good citizens, that you are going to take your place at the polling booths of the county, that you are going to have your say about the issues of the day, you can expect some day to be under the yoke of the federal government.

The American physician is the best educated, best trained humanitarian in the country. He has to be a man of intelligence to be a doctor. How dumb we are when we do not assume our rightful places in our communities, because this Association can do nothing unless you who represent your county societies start the ball rolling at the grass roots, and if you have the right kind of government at the grass roots, and I am not talking of medical society government, I am talking about local civil government, and if you want the right kind of government in your community, you can have it and you can get it, because you have to be something else besides a doctor, you have to be a good citizen.

If you do not do it, you cannot have good government at the state level nor at the national level. You have a serious responsibility. We are measuring up to it more than we ever have before in our history. We have not measured up to it as we should even now. I want this country to be the kind of a country that I think it is, and I want my grandchildren to grow up in the same kind of a country that I grew up in, independent, believing in personal liberty; and with personal liberty is personal responsibility. The greatest country on earth. We can keep it, we can lose it. The American Medical Association is the greatest federation of state medical societies in the world, and we can have the kind of an American Medical Association we want, if you and I will do our jobs. Thank you.

The Speaker thanked Dr. Alphin and Dr. Hess for their remarks.

Gerald L. Miller, M.D., Kansas City, reported for the Reference Committee on Amendments to the Constitution and By-laws.

REPORT OF THE REFERENCE COMMITTEE ON AMENDMENTS TO THE CONSTITUTION AND BY-LAWS

The Reference Committee on Amendments to the Constitution and By-laws approved the report of the standing Committee on Constitution and By-laws as it was printed.

The Committee studied the report of the Committee on Physical Medicine and its recommendation that there be a standing committee on rehabilitation and this Committee presents the following amendment to the by-laws to lay on the table until the Wednesday session of the House of Delegates:

Amend Chapter VII. Committees. Sec. 2, by adding "A Committee on Physical Medicine and Rehabilitation" following the words "A Committee on Laboratory Medicine."

Further amend Chapter VII. Committees. Sec. 2, by inserting the following paragraph at the end of the Section 2: "The Committee on Physical Medicine and Rehabilitation shall consider matters concerned with physical medicine and with rehabilitation, including vocational rehabilitation."

The Reference Committee studied the recommendation of the Committee on Mental Health and presents the following resolution to lie on the table the required length of time and be acted on at the Wednesday session of the House of Delegates:

Amend Chapter VII. Committees. Sec. 2, paragraph 10, reading "The Committee on Mental Health shall engage in the promotion . . ." by inserting the words "shall be composed of ten members not all of whom are specialists in psychiatry and" following the word "Health" so that when amended the paragraph will read: "The Committee on Mental Health shall be composed of ten members not all of whom are specialists in psychiatry and shall engage in the promotion of good mental health, the prevention of mental ill health and lend its support toward securing cooperation of all state or governmental agencies in obtaining better treatment of the mentally ill. It shall cooperate with the Council on Mental Health of the American Medical Association and with the Division of Mental Diseases of the State of Missouri."

Mr. Speaker, I move the adoption of this report.

On second, the report was adopted.

Harold R. Rapp, M.D., Cape Girardeau, reported for the Reference Committee on Miscellaneous Affairs.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS AFFAIRS

The Reference Committee on Miscellaneous Affairs met in Room 215, Hotel President, at 4:00 p. m., March 27, 1955, with all members present. The reports of committees of the previous year were studied.

The report of the Committee on Publication was accepted by the Committee and it was felt by the Committee that Vincent Williams, M.D., and his Committee, R. O. Muether, M.D., Paul O. Hagemann, M.D., M. D. Overholser, M.D., and John P. Ferguson, M.D., be highly commended for the improved quality seen in the 51st volume of Missouri Medicine.

Preparation for county and city centennial celebrations were in evidence at the banquet.

The report of the Committee on Scientific and Postgraduate Work was approved.

The report of the Committee on Defense was approved.

The report of the Committee on Public Policy and Public Relations was approved with the recommendation that the "war" continue in the hope that the next "battle" may be the victorious one.

The report of the Committee on Hospital and Professional Relations was approved.

The report of the Committee on Study of Cardiac Diseases was approved.

The report of the Committee on Rural Medical Service was approved.

The report of the Committee on Control of Venereal Disease was approved by the Committee which wishes to give special reference to paragraphs 6, 7 and 8, regarding the opposition of the Committee on Laboratory Medicine to the reporting of names of patients for a positive serology to the Division of Health by the private hospital laboratories, but believe that this function should rest with the private physician at the time the diagnosis is established. It is the opinion of the Reference Committee on Miscellaneous Affairs that this is a function of the physician and his responsibility to his patient, and that no responsibility to the patient for making the report should rest with the private hospital or laboratory doing the serological examination.

The report of the Committee on Laboratory Medicine was approved following discussion in regard to the recommendation that the State of Missouri be represented in the North Central Blood Bank Clearing House by the physician named in the report, Angelo Lapi, M.D. The current recommendation of this Committee was the approval of the autopsy permit form which has had the previous approval of the Missouri Society of Pathologists and by the Missouri State Medical Association.

It was the opinion of the Committee that the standing committees listed had all done excellent work during the previous year and that the members of the Missouri State Medical Association have been well served by all the men working on those committees.

Mr. Speaker, I move that the report of the Reference Committee on Miscellaneous Affairs be adopted.

On second, the report was adopted.

Louis H. Kohler, M.D., St. Louis, presented the report of the Reference Committee on Resolutions.

REPORT OF THE REFERENCE COMMITTEE ON RESOLUTIONS

The Reference Committee on Resolutions, composed of Louis H. Kohler, St. Louis, J. P. Ferguson, Springfield, and Frank B. Leitz, Kansas City, considered the resolution presented by the Committee on Laboratory Medicine. The Committee has approved the resolution as follows:

Whereas, The performance and interpretation of laboratory examinations have been repeatedly defined as the practice of medicine, and

Whereas, Present and proposed Blue Cross contracts include these medical services, and

Whereas, All other medical services are covered under Blue Shield, therefore be it

Resolved, That the House of Delegates of the Missouri State Medical Association protest the inclusion of these medical services in Blue Cross contracts and recommend their coverage under Blue Shield contracts only, and be it further

Resolved, That copies of this resolution be sent to all Blue Cross and Blue Shield organizations operating in the State of Missouri and to the Blue Cross and Blue Shield Commissions in Chicago.

The Committee also considered the resolution presented by the Council and approves it as follows:

Whereas, Presidents of the Association are elected by the House of Delegates because they are esteemed by the membership, and

Whereas, Presidents who have served and remained interested in the affairs of the Association have contributed much to the thinking of the House of Delegates, and

Whereas, They have been of invaluable assistance to officers, personnel and the membership, and

Whereas, When Past Presidents are removed by death and their guidance and friendship is lost, it is felt deeply by the House of Delegates, therefore be it

Resolved, That the House of Delegates of the 97th Annual Session expresses its grief and feeling of loss in the deaths during the last year of four of its Past Presidents, Robert E. Schlueter, St. Louis; Tolman W. Cotton, Van Buren; A. W. McAlester, Jr., Kansas City, and Frank I. Ridge, Kansas City, and be it further

Resolved, That this resolution become a part of the proceedings of this 97th Annual Session.

Mr. Speaker, I move the adoption of this report.

On second, the report was adopted.

W. A. Broyles, M.D., Bethany, presented the report for the Reference Committee on Medical Education and Public Welfare.

NEW—IN THE TOPICAL TREATMENT OF ALLERGIC SKIN CONDITIONS

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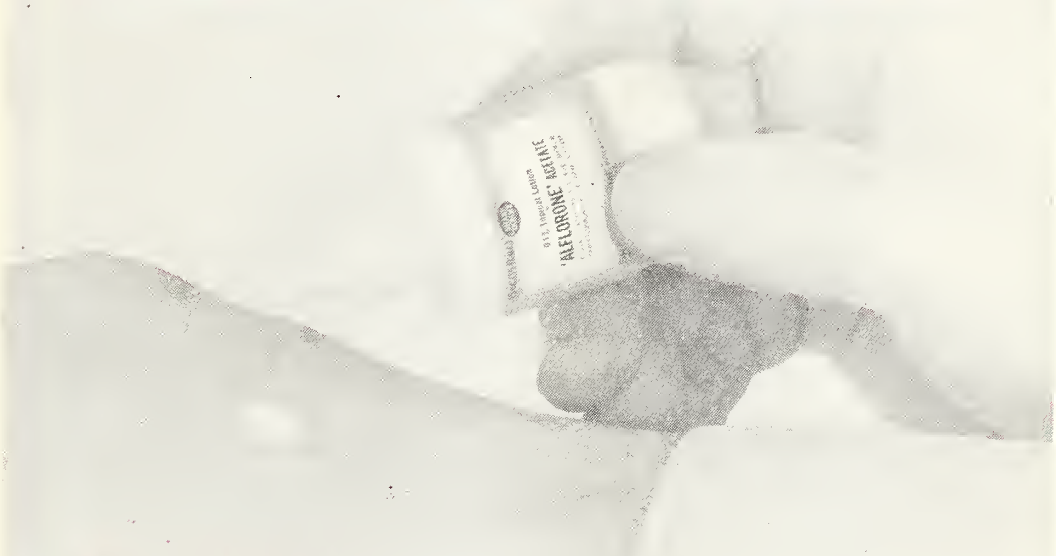

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Superior spreading qualities—a small quantity covers a wide area.

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REPORT OF THE REFERENCE COMMITTEE ON MEDICAL EDUCATION AND PUBLIC WELFARE

The report of the Committee on Cancer has been approved as published. The Reference Committee suggests that a more extensive investigation be made of patients referred to the Ellis Fischel State Cancer Hospital and other agencies offering free care, with the aim of lessening the incidents of non-cancer patients arriving at the institutions. It is also urged that a more effective method be devised for establishing financial eligibility. It is believed that more emphasis should be given to the means test.

The report of the Committee on Medical Economies has been approved as published, with the suggestion that the Council renew its offer to assist the University of Missouri School of Medicine in any acceptable manner, including aid in presenting special instruction at both undergraduate and postgraduate level.

The report of the Committee on Maternal Welfare has been approved as published.

The report of the Committee on Conservation of Eyesight has been approved as published.

The report of the Committee on Health and Public Instruction has been approved as published.

The report of the Committee on Tuberculosis has been approved as published.

Mr. Speaker, I move the adoption of this report.

On second, the report was adopted.

Joseph C. Peden, M.D., St. Louis, presented the report of the Reference Committee on Reports of Officers.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS

The Reference Committee on Reports of Officers met in Room 207, Hotel President, at 3:30 p. m., Sunday, March 27, with Officers and other interested members. Consideration was given to all of the reports as printed in the booklet, "Reports of Officers and Committees," and the Supplementary Report of the Council.

The addresses of the President, Dr. Petersen, and the President-elect, Dr. Buhler, were commended by the Committee and were approved by it wholeheartedly and the Committee wishes to express its appreciation for the great amount of work that Dr. Petersen has done in behalf of the Association for the past year. The Committee also wishes to express to Dr. Buhler its best wishes for success in the coming year.

Dr. Petersen admires Past President Key.

The reports of the Secretary and Executive Secretary are entirely factual and are approved by the Committee.

The Committee wishes to point out that the Report of the Treasurer indicates that the Association will be operating on a deficit budget for the year 1955. Investigation by the Committee indicates that there are adequate reserve funds, but that if the present financial condition continues, the Committee recommends that definite steps be taken to correct this situation.

The Committee studied the Report of the Council as published in the "Reports of Officers and Committees" and the Supplementary Report of the Council, both of which were approved. Specifically, the Committee wishes to strongly endorse the continuation of the study and efforts on the part of the Council and related committees in their consideration of the legislation dealing with the single licensure act to the end that an effective solution be attained.

The Committee wishes to recommend that all of the reports, including the Supplementary Report of the Council be approved.

Mr. Speaker, I move the adoption of this report.

On second, the report was adopted.

E. W. Allen, M.D., Carrollton, gave the report of the Reference Committee on Scientific Exhibits.

REPORT OF THE REFERENCE COMMITTEE ON SCIENTIFIC EXHIBITS

The Reference Committee on Scientific Exhibits recommends to the House of Delegates the following awards:

1st Award: Inhalation Therapy, American College of Chest Physicians.

2nd Award: The Earlier Diagnosis of Cervical Carcinoma, J. Milton Singleton, M.D.; Ferdinand C. Helwig, M.D., and Joseph C. Williams, Jr., M.D., Kansas City.

3rd Award: Alcoholism in Missouri, Committee on Alcoholism.

Mr. Speaker, I move the adoption of this report.

On second, the report was adopted.

C. H. Lewellen, M.D., Louisiana, gave the report of the Reference Committee on Technical Exhibits.

REPORT OF THE REFERENCE COMMITTEE ON TECHNICAL EXHIBITS

The Reference Committee on Technical Exhibits recommends to the House of Delegates the following awards:

1st Award: A. S. Aloe Company, Kansas City.
2nd Award: G. D. Searle & Company, Chicago.
3rd Award: American Ferment Co., Inc., New York.

Mr. Speaker, I move the adoption of this report.

On second, the report was adopted.

W. S. Sewell, M.D., Springfield, gave the report of the Council.

REPORT OF THE COUNCIL

The House of Delegates on Sunday referred to the Council the Report of the Committee on Alcoholism.

The Council compliments the Committee highly on the efficient work and study it has done and in making the study of the Committee available to the membership.

The Council, however, recommends to the House of Delegates that the Committee be encouraged to continue its study, including study toward possible legislation but that the proposed resolution not be presented to the Legislature at this session, the feeling of the Council being that at a later date a more definitive piece of legislation might be effected.

On motion, duly seconded, the report was adopted.

J. C. Cope, M.D., Columbia, presented the following resolution which was referred by the Speaker to the Reference Committee on Resolutions:

WHEREAS, The Past Presidents of the Missouri State Medical Association are esteemed and valued members of this Association, and

WHEREAS, Many of these Past Presidents, through age or illness, cannot attend this meeting of this Association, therefore be it

Resolved, That the Secretary of this Association be directed to convey salutations from this Association to each Past President following each meeting of this Association.

The Speaker referred this resolution to the Reference Committee on Resolutions.

Curtis H. Lohr, M.D., St. Louis, presented the following resolution.

Resolution

WHEREAS, The Missouri Senate has now under consideration House Bill 73 which provides for the extension of Civil Defense Services to national disasters and,

WHEREAS, The Missouri State Medical Association's Committee on Emergency Medical Services has reported to this assembly that the proposed extension is essential if the public's interest in active participation in Civil Defense is to be stimulated and if Civil Defense is to function adequately in the event of enemy action, therefore be it

Resolved, That the House of Delegates give its approval to the provisions of H. B. 73 and, be it further

Resolved, That the Missouri Senate be requested to give House Bill 73 its favorable consideration.

Dr. Lohr asked unanimous consent of the House of Delegates to act on the resolution without referral. Upon unanimous consent and upon motion, duly seconded, the resolution was adopted.

Daniel L. Sexton, M.D., St. Louis, presented the following resolution which the Speaker referred to the Reference Committee on Resolutions:

WHEREAS, The financial condition of the medical schools in this country is strained and in some instances is at the point where assistance is absolutely essential, and

WHEREAS, The threat of federal support to medical schools is becoming ever more apparent, and

WHEREAS, Medical Schools may feel constrained to turn for support to sources not in the best interests of organized medicine in order to maintain their structure, and

WHEREAS, The medical profession has a direct obligation in the training of medical students and in the furthering of the profession, therefore be it

Resolved, That the Missouri State Medical Association go on record as strongly urging all members of the Association to support the American Medical Education Fund and join in with the alumni of their respective schools in lending financial support to their alma maters, and be it further

Resolved, That the Council of the Missouri State Medical Association instruct its publications committee and its editors to carry on a vigorous campaign through the medium of the pages of MISSOURI MEDICINE in urging the cooperation and financial support of the members for this cause, and be it further

Resolved, That component societies of the Association be notified in writing of this action and urged to carry out an active and continuing campaign in support of this program.

The Speaker referred this resolution to the Reference Committee on Resolutions.

John R. Dixon, M.D., Brookfield, submitted the following resolution:

WHEREAS, Recent articles in both lay and medical press with a national scope have given widespread publicity to grievance or mediation committees, and

WHEREAS, Several of the constituent societies of the Missouri State Medical Association already have such committees operating successfully at a local level, and

WHEREAS, The Missouri State Medical Association does not at the present time operate such a committee, be it

Resolved, That

1. The Missouri State Medical Association establish a grievance committee for the purpose of acting as a court of appeals to which constituent societies may refer physician-patient problems that cannot be successfully mediated at a local level; and for the purpose of mediating all other professional problems that may arise.
2. That the President of the Missouri State Medical Association shall appoint a committee of five members of the Association to study the possible functions of the proposed committee, formulate rules, regulations and procedures under which the committee shall operate and report their recommendation at the next regular meeting of the House of Delegates.

Guests chatted after the banquet.

The Speaker referred this resolution to the Reference Committee on Resolutions.

Charles M. Lederer, M.D., Warrensburg, presented the following resolution:

WHEREAS, The existence of strong liaison and rapport between the Legislature of the State of Missouri and the Missouri State Medical Association are fundamental to the proper functioning of the Association, and

WHEREAS, It is necessary to have frequent and regular personal contacts between the Association and members of the Legislature in order to establish and maintain such liaison and rapport, and

WHEREAS, The present geographical location of the Association's Executive Office makes it inconvenient for members of the Association to assemble expeditiously and economically for such purposes, and

WHEREAS, It is desirable to have the Association's Executive Office geographically located where it will not be inequitably susceptible to the influence of any one large constituent part of the Association, and

WHEREAS, It is desirable to have the Executive Office of the Association located in near proximity to the University of Missouri School of Medicine, therefore be it:

Resolved, That the President of the Missouri State Medical Association appoint a special committee to investigate the feasibility of relocating the Executive Office of the Missouri State Medical Association in Jefferson City, Missouri; and be it further

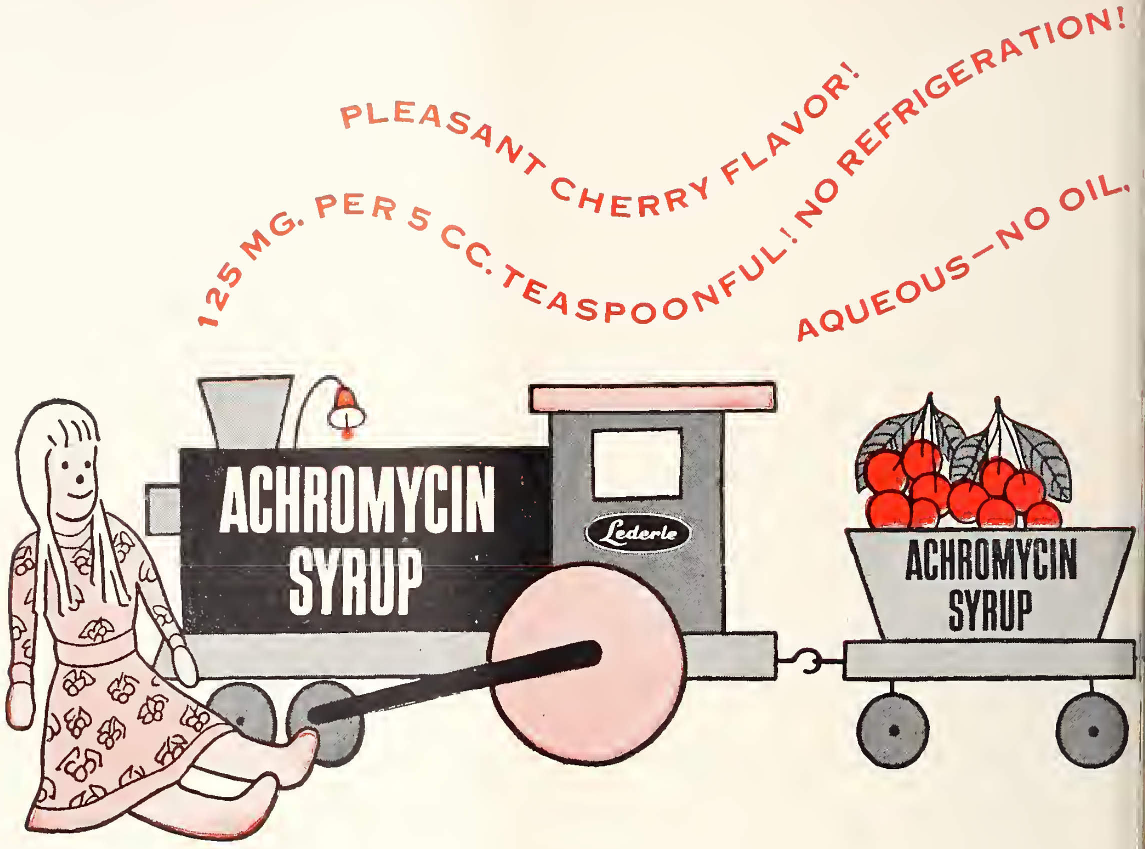
Resolved, That the Committee findings and recommendations be reported to the House of Delegates at the next regular meeting.

Duff S. Allen, M.D., St. Louis, presented the two following resolutions, stating that it was done at the request of the State Board of Medical Examiners:

The State Board of Medical Examiners in executive session on March 28, 1955, passed a motion to report their disapproval of House Bill 457 to the Resolutions Committee of the House of Delegates of the Missouri State Medical Association, and to request that they take action on this motion.

Their reasons for opposing this Bill are:

1. The bill sets up a director for the State Board of Medical Examiners, who is not a doctor.
2. This Director takes over the active control of the Board.
3. It prevents the Board from employing a competent executive secretary.
4. It prevents the Board from instituting investigations of irregularities in the practice of medicine, both by licensed doctors and those who may be practicing medicine without a license.
5. It adds a layman to the Board of Medical Examiners who could not be qualified to pass judgment intelligently on the medical problems which come before the Board.

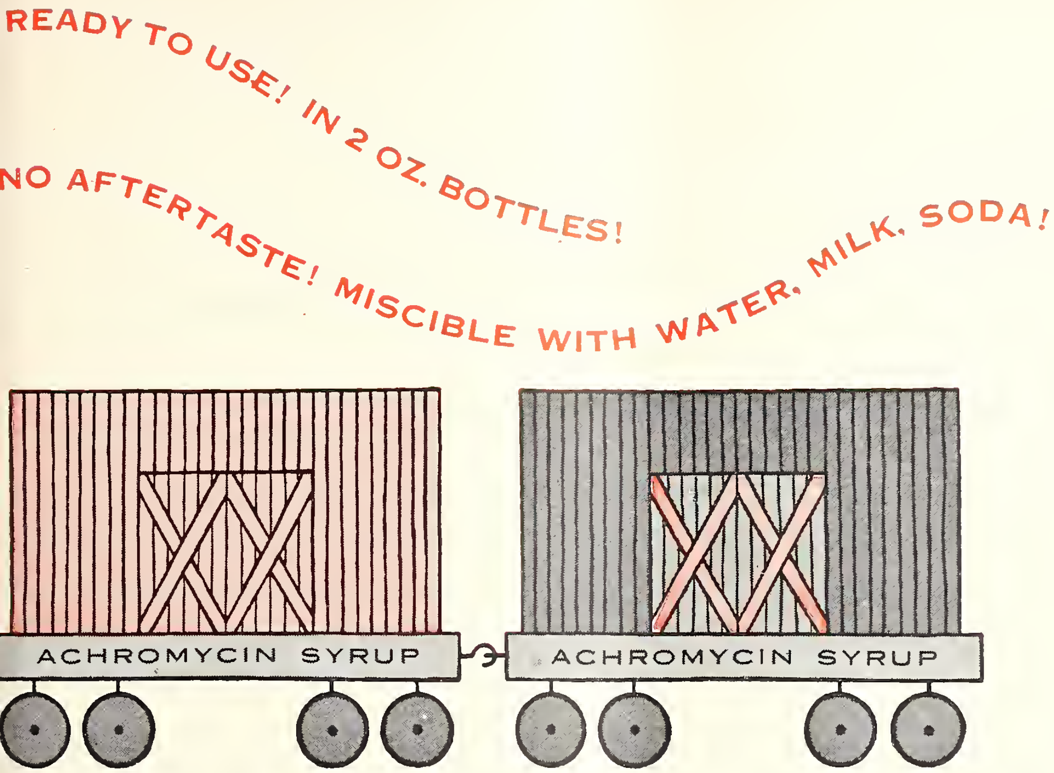

PLEASANT CHERRY FLAVOR!
125 MG. PER 5 CC. TEASPOONFUL! NO REFRIGERATION!
AQUEOUS—NO OIL.
ACHROMYCIN SYRUP
Lederle
ACHROMYCIN SYRUP

ACHROMYCIN*

HYDROCHLORIDE
TETRACYCLINE HCI *Lederle*

OTHER FORMS OF ACHROMYCIN FOR PEDIATRIC USE:

PEDIATRIC DROPS (Cherry Flavor): 100 mg. per cc. (approx. 5 mg. per drop)
ORAL SUSPENSION (Cherry Flavor): 250 mg. per teaspoonful (5 cc.)
SPERSOIDS* Dispersible Powder (Chocolate Flavor): 50 mg. per rounded teaspoonful (3 Gm.)


READY TO USE! IN 2 OZ. BOTTLES!
NO AFTERTASTE! MISCIBLE WITH WATER, MILK, SODA!
ACHROMYCIN SYRUP
ACHROMYCIN SYRUP

SYRUP

ACHROMYCIN • broad-spectrum • rapid diffusion • prompt control of infection • well tolerated • effective against Gram-positive and Gram-negative bacteria, rickettsiae, and certain viruses and protozoa.

Today's most widely prescribed broad-spectrum antibiotic, tested and accepted by foremost medical authorities, produced and marketed by Lederle.

Lederle

LEDERLE LABORATORIES DIVISION
AMERICAN Cyanamid COMPANY **Pearl River, New York**

*REG. U.S. PAT. OFF.

The State Board of Medical Examiners in executive session on March 28, 1955, passed a motion to report their disapproval of House Bill 562 to the Resolutions Committee of the House of Delegates of the Missouri State Medical Association, and to request that they take action on this motion.

The reasons for opposing this Bill are:

1. It creates a special appeals board of lay individuals, to pass on their actions.
2. The board of medical examiners would be bound by the decisions of the special appeals board.
3. The freedom of action of the Board of Medical Examiners would be further circumscribed by having the individual members of the Board being made subject to charges of misdemeanor and personal damage suits if any one disagreed with their decisions.

The Speaker referred these two resolutions to the Reference Committee on Resolutions.

The place of meeting of the Reference Committee on Resolutions was announced.

Upon motion, duly seconded, the House of Delegates adjourned at 5:05 p. m.

WEDNESDAY, MARCH 30, 1955

The House of Delegates convened at 1:30 p. m., March 30, in the Little Theater, Municipal Auditorium, with the Vice Speaker, Joseph L. Fisher, presiding.

R. Lee Hoffmann, M.D., Kansas City, reported for the Committee on Credentials.

On motion, duly seconded, the roll call was dispensed with.

E. Royse Bohrer, M.D., Jefferson City, Secretary, read the minutes of the previous sessions, which, upon motion and second, were approved.

The report of the Committee on Nominations was presented.

REPORT OF THE COMMITTEE ON NOMINATIONS

For Vice Presidents: L. P. Forgrave, M.D., St. Joseph; B. M. Stuart, M.D., Boonville; D. I. L. Seabaugh, M.D., Jackson.

For Delegates to the American Medical Association: Joseph C. Peden, M.D., St. Louis; alternate, Walter Baumgarten, M.D., St. Louis. F. L. Feierabend, M.D., Kansas City; alternate, Rolla B. Wray, M.D., Nevada.

For Speaker of the House of Delegates: Joseph L. Fisher, M.D., St. Joseph; Vice Speaker, O. P. Hampton, M.D., St. Louis County.

On motion, duly seconded, these officers were declared elected.

Curtis H. Lohr, M.D., St. Louis, nominated Carl F. Vohs, M.D., St. Louis, for President-Elect.

Upon motion the Secretary was instructed to cast the unanimous ballot of the House of Delegates for Carl F. Vohs, M.D., St. Louis, for President-Elect. The Secretary cast the unanimous ballot of the House of Delegates for Dr. Vohs for President-Elect and the Speaker declared Dr. Vohs so elected.

Carl F. Vohs, M.D., St. Louis: Gentlemen, I want to thank you for this high honor. I feel like a school boy who has gone through the eighth grade and is now receiving his diploma.

I am looking forward to the next two years in associating with our President and the Council and the work that lies before us. Two weeks ago in Chicago, we celebrated the 25th anniversary of Blue Cross. The beginning, of course, was down at Baylor University and we here in Missouri almost immediately after that began to develop Blue Cross plans. Our plan began in 1935, so that makes us about twenty years old. Blue Shield followed soon after that, but it took a lot of hard work and a lot of doing by many members of this Association to put it over. We need leadership in this field of work. If we do not, as medical men, show leadership, I am afraid that the lay people who have become tremendously interested in this field will take it over and we will be lost in the shuffle. At this convention in Chicago, there were between nine hundred and a thousand people, representing Blue Cross principally but many representing Blue Shield. But the lay people far outnumbered the medical men at the convention.

It behooves us, if we want to maintain our independence and freedom, to see that we get leadership in this line of work. I think there are some younger men who have business ability and ability along these lines that should be trained. I have enjoyed the work and I am looking forward to many, many more years of service to you. Thank you very much.

E. Royse Bohrer, M.D., Jefferson City, announced the following reports of election of Councilors: Second District, W. F. Francka, M.D., Hannibal, reelected; Fourth District, Joseph C. Creech, M.D., Troy; Sixth District, C. G. Stauffacher, M.D., Sedalia, reelected; Eighth District, W. S. Sewell, M.D., Springfield, reelected; Tenth District, Ben M. Bull, M.D., Ironton, reelected.

Louis H. Kohler, M.D., St. Louis, gave the report of the Reference Committee on Resolutions.

REPORT OF THE REFERENCE COMMITTEE ON RESOLUTIONS

Your Reference Committee on Resolutions, composed of Frank B. Leitz, J. P. Ferguson and Louis H. Kohler, met on Monday afternoon, March 28, to consider several resolutions which were introduced at the House of Delegates meeting, Monday, March 28. The first of these, a resolution introduced by James C. Cope, Columbia, requesting the secretary to offer the regrets

Guest speakers served as panelists at round table luncheons.

Luncheons on Monday and Tuesday were well attended.

of the membership because of the inability of Past Presidents to attend the meeting, was unanimously approved by the Committee.

Mr. Speaker, I move the adoption of this part of the report.

On motion, duly seconded, this was adopted.

A resolution introduced by Daniel L. Sexton, St. Louis, pertaining to greater activity by the State Association in urging members to contribute to the American Medical Education Foundation was considered. Your Committee unanimously approves this resolution.

Mr. Speaker, I move that this portion of the report be adopted.

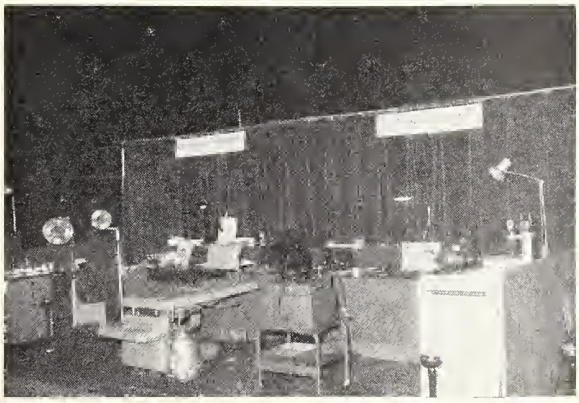
On motion, duly seconded, this was adopted.

Two resolutions pertaining to House Bill 457 and House Bill 562, introduced by Duff Allen, St. Louis, at the request of the Missouri State Board of Medical Examiners were considered by the Committee and unanimously approved.

Mr. Speaker, I move that this part of the report be adopted.

On motion, duly seconded, this was adopted.

A resolution dealing with a committee to study the establishment of a Grievance Committee within the Missouri State Medical Association was introduced by John R. Dixon, Brookfield. It was pointed out by many who attended the hearing that complaints of patients are better resolved at the local level than they would be if a State Association committee were formed. In cases of physician versus physician grievances, your Committee agreed with the thoughts of those who attended the meeting, and pointed out that there are two outlets for considering inter-professional grievances; one, the Council of the State Medical Association, the other the Missouri State Board of Medical Examiners. The By-Laws of the Association, page 10, Chapter VI, Section 2, provides the following: "Each Councilor shall be organizer, peacemaker and censor for his district," and Section 4 of the same Chapter provides further, "The Council shall be the Board of Censors of the Association. It shall hear, and by a majority vote, determine and adjudicate, all questions: Involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association; of an ethical nature brought before the House of Delegates or the General Meeting, which shall be referred to the Council without discussion of discipline affecting the conduct of members or component societies, from which an appeal is taken from the decision of a District Councilor. Its decision in all cases shall be final, unless appealed to the then convened meeting, or to the next meeting, of the House of Delegates." Your Committee unanimously recommends that the resolution not be adopted.



A. S. Aloe Company won exhibit award.

Dr. Lohr nominated Dr. Vohs for President-elect.

Mr. Speaker, I move the adoption of this part of the report.

On motion, duly seconded, this motion was adopted.

A resolution introduced by Charles M. Lederer, Warrensburg, concerning the establishment of a committee to study relocation of the MSMA Executive Office from its present location in St. Louis to Jefferson City, was considered by your Committee. The majority of the Committee recommends that this resolution not be adopted.

Mr. Speaker, I move the adoption of this part of the report.

On motion, duly seconded, this was adopted.

Mr. Speaker, I move that the report as a whole be adopted.

On motion, duly seconded, this was adopted.

The Speaker asked Dr. Bohrer to read the two amendments to the By-laws which had lain on the table from Monday, which Dr. Bohrer read as follows:

Amend Chapter VII. Committees. Sec. 2, paragraph 10, read in "The Committee on Mental Health shall engage in the promotion . . ." by inserting the words "shall be composed of ten members not all of whom are specialists in psychiatry and" following the word "Health" so that when amended the paragraph will read: "The Committee on Mental Health shall be composed of ten members not all of whom are specialists in psychiatry and shall engage in the promotion of good mental health, the prevention of mental ill health and lend its support toward securing cooperation of all state or governmental agencies in obtaining better treatment of the mentally ill. It shall cooperate with the Council on Mental Health of the American Medical Association and with the Division of Mental Diseases of the State of Missouri."

Amend Chapter VII. Committees. Sec. 2, by adding "A Committee on Physical Medicine and Rehabilitation" following the words "A Committee on Laboratory Medicine."

Further amend Chapter VII. Committees. Sec. 2, by inserting the following paragraph at the end of the Section: "The Committee on Physical Medicine and Rehabilitation shall consider matters concerned with physical medicine and with rehabilitation, including vocational rehabilitation."

Upon motion, duly seconded, the two By-laws were adopted.

Victor B. Buhler, M.D., Kansas City, was installed as President and other newly elected officers were installed.

Jerome I. Simon, M.D., St. Louis, reported to the House of Delegates the regrets of Victor E. Scherman, M.D., St. Louis, Speaker, at his inability because of illness to be present at the session.

Upon motion, duly seconded, the House of Delegates gave a vote of thanks to the Jackson County Medical Society for their hospitality.

Daniel L. Sexton, M.D., St. Louis, in the names of the St. Louis County Medical Society and the St. Louis Medical Society, invited the Association to meet in St. Louis in 1956.

Upon motion, duly seconded, the invitation was accepted.

Victor B. Buhler, M.D., Kansas City, read the appointment to committees to fill expired terms and chairmenships, which were approved by the House of Delegates, as follow:

APPOINTMENTS TO COMMITTEES—1955

Scientific and Postgraduate Work: Alphonse McMahon, St. Louis, Chairman; Michael S. Wepprich, Washington; Arthur B. Smith, Kansas City (to fill unexpired term of Maxwell G. Berry, resigned). Associate Members: Charles M. Grace, Chillicothe; Allen I. Herman, St. Joseph; Charles F. Wilson, Cape Girardeau; Peter V. Siegel, Smithton; Carroll P. Hungate, Kansas City; Eugene M. Bricker, St. Louis; Charles E. Martin, St. Louis; Ronald F. Elkins, Springfield.

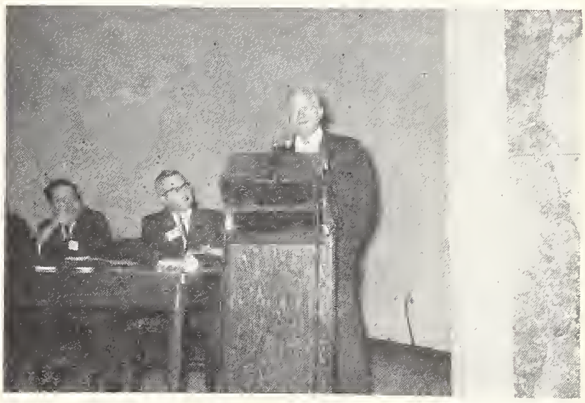
Defense: C. E. Hyndman, St. Louis, Chairman; L. P. Forgrave, St. Joseph; James D. Horton, Springfield.

Public Policy and Public Relations: Jerome I. Simon, St. Louis, Chairman; T. E. Potter, St. Joseph; T. J. Hoerchler, Shelbina; Russell J. Crider, St. Charles; J. W. Allee, Columbia; Rolla B. Wray, Nevada; Ralph Perry, Kansas City; O. B. Crawford, Springfield; H. W. Carrington, Lebanon; Jerome J. Bredall, Perryville.

Medical Education and Hospitals: Ralph R. Coffey, Kansas City, Chairman; W. J. Ferguson, Sikeston; George J. L. Wulff, University City.

Cancer: Joseph L. Fisher, St. Joseph, Chairman; Marvin L. Napper, Springfield; Thomas Martin, St. Louis. Associate Members: George O. Miles, Kansas City; Frederick J. McCoy, Kansas City; George A. Carroll, St. Louis; George L. Watkins, Farmington; C. W. Meinershagen, Jefferson City; A. N. Arneson, St. Louis; Charles E. Lockhart, Springfield.

Medical Economics: A. P. Rowlette, Moberly, Chairman; John R. Forgrave, St. Joseph. Associate Members: J. H. Trolinger, Jackson; George L. Hawkins, St. Louis.



Dr. Vohs accepts the nomination.

Newly elected officers took oath of office.

Maternal Welfare: Joseph L. Johnston, Springfield, Chairman; Helman C. Wasserman, St. Louis; Gerald L. Miller, Kansas City. Associate Members: Robert W. Smith, Marceline; William See, Columbia; James E. Keeler, Kansas City; Joseph M. Krebs, St. Louis; John E. Burch, Joplin; Francis R. Burns, Hannibal; Dennis B. Elrod, Cape Girardeau.

Infant and Child Care: Daniel B. Landau, Hannibal, Chairman; H. Ewing Wachter, St. Joseph; Raymond J. LaDriere, St. Louis; Guy N. Magness, University; John S. Sennott, Jefferson City; O. B. Barger, Harrisonville; Roy F. Garrison, Kansas City; Eugene J. Schwartz, Springfield; Jack N. Wiles, West Plains; W. E. Henrickson, Poplar Bluff.

Health and Public Instruction: A. W. McAlester, III, Kansas City, Chairman; J. Earl Smith, St. Louis.

Constitution and By-Laws: Curtis H. Lohr, St. Louis, Chairman; W. L. Allee, Eldon; P. W. Jennings, Canton.

Fractures: Paul W. Meyer, Kansas City, Chairman; William H. Snead, Springfield. Associate Members: Henry C. Bauman, Maryville; B. L. Murphy, Hannibal; Thomas G. Otto, Cape Girardeau; Ralph K. Earp, St. Louis; Frank D. Sundstrom, Springfield; O. P. Hampton, Clayton.

Conservation of Eyesight: C. Souter Smith, Springfield, Chairman; Theodore Sanders, St. Louis. Associate Members: John McLeod, Kansas City; Paul G. Wolff, Cape Girardeau; Michael F. Pernoud, St. Louis; D. E. Eggleston, Macon; Horace E. Allen, Columbia; William B. Wilcoxen, Bowling Green; W. L. Post, Joplin.

Control of Venereal Disease: E. M. Cannon, St. Louis, Chairman; A. W. Neilson, St. Louis. Associate Members: R. J. Murphy, Kansas City; Edwin M. Powell, Springfield.

Industrial Health: H. M. Roebber, Bonne Terre, Chairman; Vencel W. Hollo, St. Louis; William H. Duncan, Kansas City. Associate member: Douglas A. Ries, Richmond Heights.

Diabetes: Henry E. Oppenheimer, St. Louis, Chairman; J. Bruce Lemmon, Jr., Springfield; Ira C. Layton, Kansas City. Associate Members: Vincent J. LoPiccolo, St. Louis; Robert E. Koch, Clayton; Ralph H. Jones, Marshall; Byron M. Stuart, Boonville.

Anesthesiology: Joseph A. McNearney, Richmond Heights, Chairman, (and to fill the unexpired term of R. M. S. Barrett, resigned); O. T. Blanke, Joplin; Merritt H. Kimball, Kansas City. Associate Member: Seymour Brown, St. Louis.

Hospital and Professional Relations: Hollis Allen, St. Louis, Chairman; Milton Shoss, Cape Girardeau.

Laboratory Medicine: B. C. Portuondo, St. Louis, Chairman; Angelo Lapi, Kansas City; Hilliard Cohen, Kansas City.

Tuberculosis: Paul Murphy, St. Louis, Chairman; I. J. Flance, St. Louis; E. E. Glenn, Springfield; Lawrence E. Wood, Kansas City; J. L. Mudd, St. Louis; C. A. Brasher, Mount Vernon; Walter C. Gray, St. Louis; F. E. MacInnis, Kansas City; H. L. Greene, Hannibal. (1 year terms)

Study of Cardiac Disease: E. Lee Shrader, St. Louis, Chairman; Earl L. Loyd, Jefferson City; V. Bryce Ballard, Kansas City; E. J. McIntire, Carthage; A. M. Estes, Cape Girardeau. Associate Members: W. I. Park, Springfield; William A. Sodeman, Columbia; G. R. Hudson, Kirksville; M. J. Payne, St. Louis; J. Will Fleming, Moberly. (1 year terms)

Newly installed President Buhler appointed committees.

Alcoholism: Ralph E. Duncan, Kansas City, Chairman; S. D. Smith, Columbia; Kenneth C. Coffelt, Springfield; Joseph B. Kendis, St. Louis; George W. Forman, St. Joseph; Richard W. Maxwell, University City. (1 year terms)

Rural Medical Service: A. E. Spelman, Smithville, Chairman; Francis L. Kozal, Belle; W. A. Broyles, Bethany; W. J. Shaw, Fayette; John F. Pearl, St. Clair; Charles H. Lewellen, Louisiana; C. A. McBurney, Slater; A. J. C. McCallum, Aurora; John J. Killion, Portageville. (1 year terms)

Physical Medicine: D. Elliott O'Reilly, St. Louis, Chairman; Edward D. Campbell, Cape Girardeau. Associate Members: Durward G. Hall, Springfield; Otis E. James, Kansas City. (1 year terms)

Veterans Medical Care: W. J. Shaw, Fayette, Chairman; Ralph Perry, Kansas City; Leo J. Hartnett, St. Louis; Arthur R. Dalton, St. Louis. (1 year terms)

Civil Defense: A. S. Bristow, Princeton; John R. Forgrave, St. Joseph; B. L. Murphy, Hannibal; Curtis H. Lohr, St. Louis; James F. Dowd, St. Louis; William C. Allen, Glasgow; C. D. Siegel, Sedalia; Carroll Hungate, Kansas City; Don J. Silsby, Springfield; Samuel A. Grantham, Joplin; George Thoma, St. Louis. (1 year terms)

Upon motion, duly seconded, the House of Delegates adjourned *sine die* at 2:30 p. m.

THE COUNCIL

The Council met on March 30, immediately following adjournment of the House of Delegates, Victor B. Buhler, M.D., President, presiding.

Joseph C. Creech, M.D., Troy, was greeted as the new Councilor from the Fourth District. W. F. Francka, M.D., Hannibal; C. G. Stauffacher, M.D., Sedalia; W. S. Sewell, M.D., Springfield, and Ben M. Bull, M.D., Ironton, were welcomed as reelected to the Council.

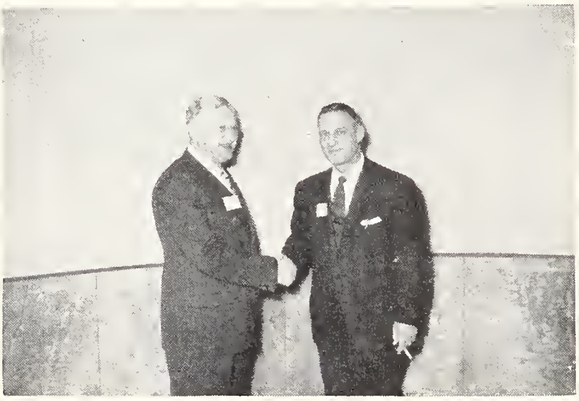
METICORTEN
PREDNISONE
Schering
SCHERING

in rheumatoid arthritis
more potent
than other corticosteroids
lessened incidence
of sodium retention
and potassium depletion

*T.M.
METICORTEN,* brand of prednisone.

The following officers were elected: W. S. Sewell, M.D., Springfield, Chairman; R. O. Muether, M.D., St. Louis, Vice Chairman; E. Royse Bohrer, M.D., Jefferson City, Secretary; Jerome I. Simon, M.D., St. Louis, Treasurer.

At the request of the Committee on Study of Cardiac Disease, the Council approved and agreed to cosponsor with the Missouri Division of Health and St. Louis University School of Medicine, a postgraduate course in "Cardiac Auscultation" at Firmin Desloge Hospital, May 11 and 12, 1955.



President and President-elect wish each other a good year.

The time and place of the next meeting was left to the Chairman of the Council and the Executive Secretary.

REGISTRATION AT THE NINETY-SEVENTH ANNUAL SESSION

First Councilor District—48

Allen, E. W., Carrollton
Bauman, Henry C., Maryville
Brewer, Lake, Ridgeway
Bristow, A. S., Princeton
Bristow, Robt. B., St. Joseph
Broyles, Watkins A., Bethany
Carter, Howard, Hamilton
Conrad, Joseph A., Chillicothe
Cullers, C. H., Trenton
Dixon, John R., Brookfield
Dowell, Donald M., Chillicothe
Edwards, Theodore F., North Kansas City
Fisher, Joseph L., St. Joseph
Goodson, Wm. H., Liberty
Grimes, Manning E., St. Joseph
Haley, Roy R., Brookfield
Herman, Allen I., St. Joseph
Howden, Thos. L., St. Joseph
Imes, E. D., Maryville
Jeck, H. Sheffield, St. Joseph
Johnson, Glenn D., Maysville
Lau, Gustav A., St. Joseph
Long, Forrest C., Savannah
Longfield, F. J., Lathrop
McCracken, S. R., Excelsior Springs
Mabrey, John P., Plattsburg
Mairs, E. J., Trenton
Mandler, Geo., Chillicothe
Matteson, Frank B., Grant City
Meluney, S. E., St. Joseph
Mundy, H. F., St. Joseph
Nixon, Edward E., Gallatin
Parker, Robert Harvey, North Kansas City
Perry, John M., Princeton
Petersen, H. E., St. Joseph
Platz, John H., Carrollton
Potter, Thompson E., St. Joseph
Quisito, Joseph M., Trenton
Robinson, John A., Edgerton
Rost, Wm. B., St. Joseph
Schroeder, Sydney O., Liberty
Smith, Robert W., Marceline
Spencer, Floyd H., St. Joseph
Sprong, Aaron A., Excelsior Springs
Vandiver, V. D., Chillicothe
Wadlow, Ernest E., St. Joseph
Wilbur, R. E., Cameron
Wilson, Fred K., Winston

Second Councilor District—19

Cohrs, Clarence C., Moberly
Davis, Landis Y., Canton
Dreyer, Philip V., Huntsville
Eggleston, D. E., Macon
Fleming, Thos. S., Moberly
Francka, W. F., Hannibal
Hawkins, G. W., Salisbury
Hoerchler, T. J., Shelbina
Jennings, P. W., Canton
Kibbe, John H., Monroe City
Lewellen, Chas. H., Louisiana
Lewellen, Charles P., Louisiana
Middleton, John W., Louisiana
Miltenberger, Vale, Kirksville
Montgomery, J. S., Milan
Murphy, Bernard L., Hannibal
Rice, Grover C., Brunswick
Smith, W. J., Hannibal
Weger, Carl C., Keytesville

Third Councilor District—50

Agress, Harry, St. Louis
Allen, Duff S., St. Louis
Allen, Henry C., Clayton
Arneson, A. H., St. Louis
Bartlett, Willard, St. Louis
Bassett, R. B., St. Louis
Baumgarten, Walter, St. Louis
Beckette, Edmund S., St. Louis
Berry, John W., St. Louis
Bilsky, Nathan, St. Louis
Bricker, Eugene M., St. Louis
Carroll, George A., St. Louis
Charles, Benjamin H., St. Louis
Conrad, Adolph H., Jr., St. Louis
Dalton, Arthur R., St. Louis
Doyle, Charles R., St. Louis
Edwards, Joseph C., St. Louis
Elman, Robert, St. Louis
Ernst, Edwin C., St. Louis
Ford, Lee T., St. Louis
Glaser, Martin J., St. Louis
Hanlon, C. Rollins, St. Louis
Jones, Otey S., St. Louis
Kelley, Robert W., St. Louis
Kenamore, Bruce, St. Louis
Kerr, David Nafe, St. Louis
Klenk, Chas. L., St. Louis
Kohler, Louis H., St. Louis
Koon, Bernard T., St. Louis
Lohr, Curtis H., Clayton
McGinnis, B. J., St. Louis
Max, Paul F., St. Louis
Merenda, Sam J., Glendale
Morris, Mary Elizabeth, St. Louis
Mueller, Robert, St. Louis
Muether, R. O., St. Louis
Neilson, Arthur W., Clayton
Norton, Wm. H., St. Louis
Peden, Joseph C., St. Louis
Schnoebelen, Paul C., St. Louis
Sexton, Daniel L., St. Louis
Signorelli, A. J., St. Louis
Simon, J. J., St. Louis
Smolik, Edmund Anton, St. Louis
Sudholt, Alfred F., Jr., St. Louis
Thompson, J. W., St. Louis
Tjoflat, Oliver E., St. Louis
Vohs, Carl F., St. Louis
Weir, Don C., St. Louis
Wiegand, Herbert C., University City

Fourth Councilor District—31

Bailey, Wm. Harold, St. Louis
Creech, J. C., Troy
Damron, Edward O., Elsberry
Diehr, M. A., St. Louis
Finkel, Barney W., St. Louis
Finley, F. L., Overland
Forsman, W. W., Sappington
Gaines, Quentin M., Kirkwood
Hampton, Oscar P., Jr., St. Louis
Hoelscher, Harold F., Warrenton
Howe, Louis F., Brentwood
Keller, Robert M., Owensville
Kendis, Joseph B., St. Louis
Koch, Otto, Clayton
McMurray, H. C., Wentzville
Magness, Guy N., University City
Mays, Frank G., Washington
Meador, James R., Clayton
Muench, L. O., Washington
Muschany, Norman K., Troy
Pearl, John F., St. Clair
Poggemeier, William H., St. Charles
Schattyn, Martyn, Kirkwood
Schmidt, Herbert H., Washington
Steiner, A. J., St. Louis
Sterling, John, Maplewood
Tichenor, R. W., Sappington
Wepprich, Michael S., Washington
Whitener, Paul R., St. Louis
Wyatt, Lois C., Kirkwood
Yoskit, Harry, Festus

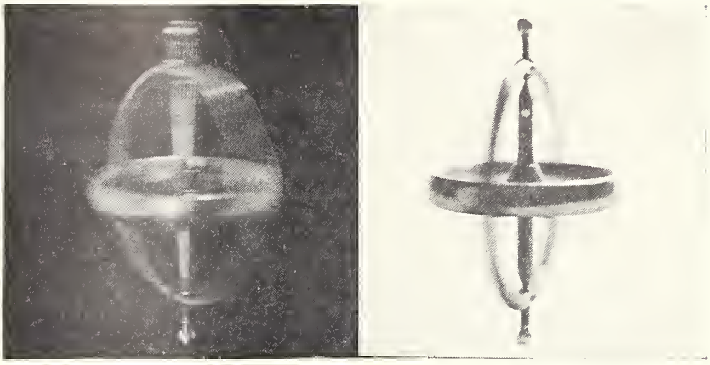
Fifth Councilor District—44

Allee, James W., Columbia
Allee, W. L., Eldon
Amos, James R., Jefferson City
Andersen, E. J. T., Montgomery City
Atkins, James A., Columbia
Belden, E. A., Jefferson City
Bloom, W. A., Fayette
Bohrer, E. Royse, Jefferson City
Clark, Kendall A., Jefferson City
Cope, J. C., Columbia
Cremer, Wm. J., Fulton
Davis, Clarence D., Columbia
Dietrich, Karl D., Columbia
Durst, Henry, Fulton
Dwyer, Thomas L., Mexico
Evans, Alden M., Columbia
Fulks, Richard B., California
Gallagher, Lionel M., California
Gardner, Joseph W., Glasgow
Garner, Lynn M., Jefferson City
Gunn, A. J., Versailles
Hardwicke, Henry M., Jefferson City
Kauffman, Ruth, Versailles
Kibbe, E. A., California
Lamke, Charles M., Columbia
Leslie, J. Paul, Jefferson City
Lyle, Ray, Versailles
McComas, A. R., Sturgeon
Meier, Francis X., Jefferson City
Meinershagen, C. W., Jefferson City
Neal, M. Pinson, Columbia
Overholser, Milton D., Columbia
Shull, G. Donald, Jefferson City
Smith, Stephen D., Columbia
Stephan, August P., Jefferson City
Stephenson, Hugh E., Jr., Columbia
Stewart, William J., Columbia
Stuart, B. M., Boonville
Summers, J. S., Jefferson City
Summers, J. S., Jr., Jefferson City
Washburn, J. Loren, Versailles
Windmiller, M. E., Columbia
Winn, George Warren, Boonville
Wood, George F., Fulton

Sixth Councilor District—47

Aiken, George, Marshall
Allen, Claude J., Rich Hill
Allen, Wm. H., Nevada
Barger, O. B., Harrisonville
Barone, Paul L., Nevada
Brady, H. S., Concordia
Brasher, Ben H., Lexington
Buehrer, Cletus E., Lawson
Campbell, A. J., Sedalia
Davis, C. Braxton, Nevada
Eklund, A. W., Pleasant Hill
Ellis, Coburn, Garden City

a non-barbiturate, non-habit-forming, tranquilizing and stabilizing agent



RAU-SED

(Squibb Reserpine)

Rau-sed may be employed to achieve a calming, tranquilizing effect. Rau-sed may be found useful in situations accompanied by stress and anxiety and has been reported helpful in a number of physical disorders with associated emotional overlay (such as headache, dermatologic disorders, gynecologic disorders, enuresis, etc.).

Oral Dosage for Office Practice: The usual daily dose may range from 0.25 mg. to 1.5 mg. Dosage may start with 0.25 mg. t.i.d., and may be adjusted upward or downward. It is important, in adjusting Rau-sed dosage, to consider that results may not appear for one to two weeks after therapy is instituted. When a maintenance level is achieved, Rau-sed may be given as a single daily dose or in divided doses, as the patient prefers. Some patients may need and tolerate higher dosage; in such patients, Rau-sed has proved most effective in conjunction with psychotherapy. *Note:* Patients receiving large doses, or those who receive the drug over a long period, should be watched for signs of depression; this can be alleviated by reducing the dosage or withdrawing the drug.

Supply: 0.1 mg. and 0.25 mg. tablets, bottles of 100 and 1000; 0.5 mg. tablets (scored), bottles of 50 and 500; 1.0 mg. tablets (scored), bottles of 30, 100, and 500; 4.0 mg. tablets (scored), bottles of 100 and 1000 (for psychiatric use). RAU-SED Parenteral, for the treatment of hospitalized psychiatric patients, 5.0 mg. and 10.0 mg. ampuls.

'RAU-SED' IS A SQUIBB TRADEMARK

SQUIBB A NAME YOU CAN TRUST

Fulkerson, Wilbur E., Higginsville
Glenn, David H., Warsaw
Hansen, A. L., Butler
Hartwell, Basil O., Drexel
Jennings, R. J., Windsor
Jordan, Ray B., Windsor
Kelling, Jordan, Waverly
Kennedy, R. W., Marshall
Koppenbrink, Walter E., Higginsville
LaHue, L. D., Butler
Lawless, C. L., Marshall
Lederer, Chas. M., Warrensburg
Luter, Carter W., Butler
Maddox, Albert R., Sedalia
Madison, Waite H., Marshall
Magee, Robert L., El Dorado Springs
Martin, Forrest L., Nevada
Maxson, T. Reed, Warrensburg
Morris, R. C., Nevada
Pearse, Roy W., Nevada
Richter, Wm. B., Stockton
Roberts, Paul A., Sweet Springs
Robinson, E. E., Adrian
Schooley, R. C., Odessa
Siegel, P. V., Smithton
Slickman, R. A., Appleton City
Smith, James O., Clinton
Stauffacher, C. Gordon, Sedalia
Thurber, Claude M., Windsor
Tracy, Herbert A., Belton
Triplett, Jacob S., Harrisonville
Walker, G. S., Clinton
Williams, John W., Oak Grove
Worley, Chas. A., Sweet Springs
Wray, Rolla B., Nevada

Seventh Councilor District—216

Allebach, Hobart K. B., Kansas City
Allen, Chas. E., Kansas City
Allen, Robert E., Kansas City
Allen, Wm. B., Kansas City
Altomare, Edward, Kansas City
Anderson, Isadore, Kansas City
Arms, Arnold V., Kansas City
Asher, Graham, Kansas City
Atcheson, Bellfield, Kansas City
Atwell, Floyd C., Kansas City
Barnett, Gordon P., Kansas City
Barry, John W., Kansas City
Becker, R. R., Kansas City
Berger, Dan L., Kansas City
Bergmann, Victor H., Kansas City
Berry, M. G., Kansas City
Bohan, P. T., Kansas City
Bolin, N. V., Kansas City
Bond, Marcus B., Kansas City
Bourke, T. S., Kansas City
Boutros, Amin, Kansas City
Brams, Jack B., Kansas City
Brown, Adrian J., Kansas City
Brumm, Lawrence W., Kansas City
Buckingham, W. W., Kansas City
Buhler, Victor B., Kansas City
Burns, B. I., Kansas City
Caldwell, John K., Kansas City
Capell, Clarence S., Kansas City
Carbaugh, Glenn C., Kansas City
Carlson, Hjalmar, Kansas City
Casford, Ralph S., Kansas City
Cashman, John W., Kansas City
Castles, John E., Kansas City
Coburn, Donald F., Kansas
Coffey, Ralph R., Kansas City
Coffin, Helen Kingsbury, Kansas City
Coffin, Theodore A., Kansas City
Counsell, C. M., Kansas City
Cramer, Quentin, Kansas City
Culbertson, W. F., Hickman Mills
Curran, Desmond, Kansas City
Davis, Jack M., Raytown
Deweese, E. R., Kansas City
Diveley, Rex L., Kansas City
Drowns, Bruce B., Kansas City
Duncan, Ralph Emerson, Kansas City
Duncan, Wm. H., Kansas City
Eldridge, Charles J., Kansas City
Elliott, B. Landis, Kansas City
Elliott, James R., Kansas City
Engel, L. P., Kansas City
Eubank, Dillard M., Raytown
Eubank, Will R., Kansas City
Feierabend, Frank L., Kansas City
Feist, George V., Kansas City
Ferris, Carl R., Kansas City
Fitzgerald, Robert H., Independence
Flanders, Horace F., Kansas City
Flatley, John, Raytown
Forsythe, Robert W., Kansas City
Fowler, James W., Kansas City
Fox, Charles R., Kansas City
Frick, J. Paul, Kansas City
Fuhrman, Donald L., Kansas City
Ganley, Wm. C., Kansas City
Gestring, Hugh A., Kansas City
Gilkey, Harry M., Kansas City
Gillmor, C. Stewart, Kansas City
Gist, W. L., Kansas City
Gist, William W., Kansas City
Glasscock, Ernest L., Kansas City
Goldman, Stanley, Kansas City
Goodman, Leroy, Kansas City
Goodson, Wm. H., Jr., Kansas City
Greene, W. Wallace, Kansas City
Griffith, John A., Kansas City
Growdon, John, Kansas City
Hale, Ralph, Kansas City
Hall, Thomas B., Kansas City
Hamel, Herbert A., Kansas City
Hanes, Robert L., Kansas City
Harless, M. S., Kansas City
Hartwig, Frederick H., Kansas City
Henry, Clarke L., Kansas City
Hess, Paul D., Kansas City
Hibbard, Blaine Z., Kansas City
Hickerson, William H., Independence
Hodgson, Frank H., Kansas City
Hoeper, Sam D., Grandview
Hoffman, Jacob S., Kansas City
Hoffmann, R. Lee, Kansas City
Hogan, Daniel F., Kansas City
Holton, Edward B., Independence
Hungate, Carroll P., Kansas City
Hunt, Claude J., Kansas City
Hunter, Martin P., Kansas City
Hurwitt, Frank, Kansas City
Jansen, Robert, Kansas City
Jarvis, James A., Kansas City
Jennett, J. Harvey, Kansas City
Johnstone, Paul N., Kansas City
Jones, Geo. H., Kansas City
Jones, T. Reid, Kansas City
Justus, John B., Kansas City
Keeler, James E., Kansas City
Kelly, Eugene H., Kansas City
Kerr, R. W., Kansas City
Kiene, Richard H., Kansas City
Kitchen, Wm. M., Kansas City
Klein, Edward H., Kansas City
Knight, John S., Kansas City
Korth, William M., Kansas City
Kyner, Thomas A., Kansas City
Lally, James J., Kansas City
Lapi, Ruth M., Kansas City
Lee, Chester E., Kansas City
Leitz, Frank B., Kansas City
Levey, Harry B., Kansas City
Lichtor, Alexander, Kansas City
Lieberman, B. Albert, Jr., Kansas City
Lilly, Terry E., Jr., Kansas City
Long, R. Stacy, Kansas City
Lyddon, H. R., Jr., Kansas City
McComas, Robert E., Kansas City
McCoy, Frederick J., Kansas City
McCunniff, Wm. B., Kansas City
McDonnell, John F., Kansas City
McMillan, Thos. E., Kansas City
McVay, James R., Kansas City
McVay, James R., Jr., Kansas City
MacInnis, Florence E., Kansas City
Major, Hermon S., Kansas City
Makous, Norman, Kansas City
Marks, Mark M., Kansas City
Meyer, Paul W., Kansas City
Miller, Gerald Lee, Kansas City
Miller, Wade Hampton, Kansas City
Mixson, Wm. C., Kansas City
Monahan, E. P., Kansas City
Montgomery, J. G., Kansas City
Morest, F. S., Kansas City
Morrow, Raymond L., Kansas City
Mueller, Martin J., Kansas City
Mullen, Leo M., Kansas City
Mundy, William Lowe, Kansas City
Myers, John S., Kansas City
Myers, Robert M., Kansas City
Myers, Wilson A., Kansas City
Needels, Orval T., Kansas City
O'Brien, Raymond W., Kansas City
Owens, H. H., Kansas City
Owens, Richard Lee, Kansas City
Padfield, Earl G., Kansas City
Parker, Hubert M., Kansas City
Peete, Don Carlos, Kansas City
Perry, Ralph, Kansas City
Peterson, Carl M., Kansas City
Peterson, Walter R., Kansas City
Pierron, John B., Kansas City
Piper, Donald K., Kansas City
Pipkin, Garrett, Kansas City
Rader, Ada B., Martin City
Robinson, Ernest Kip, Kansas City
Robinson, G. Wilse, Kansas City
Robinson, G. Wilse, Jr., Kansas City
Rodgers, Samuel, Kansas City
Sandy, Charles, Kansas City
Saper, Philip, Lee's Summit
Sauer, Gordon C., Kansas City
Schaerrer, Wm. C., Kansas City
Schaffer, Richard Carl, Kansas City
Schorer, Edwin Henry, Kansas City
Seely, Clark W., Kansas City
Shapiro, L. M., Kansas City
Shelden, Russell D., Kansas City
Simpson, M. B., Kansas City
Singleton, J. Milton, Kansas City
Skillman, R. K., Kansas City
Skoog, A. L., Kansas City
Slentz, E. L., Kansas City
Stacey, Wallace, Independence
Staggs, Wm. A., Kansas City
Statland, Harry, Kansas City
Steffen, L. F., Kansas City
Stegman, Elmer G., Raytown
Summers, Caldwell B., Kansas City
Tarson, Solomon S., Kansas City
Tesson, James A., Kansas City
Thiessen, H. Edw., Kansas City
Trippe, H. C., Kansas City
Trowbridge, B. C., Kansas City
Trowbridge, E. H., Jr., Kansas City
Twyman, Richard A., Kansas City
Valentine, Herbert S., Kansas City
Virden, C. Edgar, Kansas City
Virden, Herbert H., Kansas City
Wade, Fredrick E., Kansas City
Wakefield, Franklin H., Kansas City
Watson, Ethel, Independence
Weaver, John L., Kansas City
Webster, Joseph G., Kansas City
White, Charles H., Kansas City
White, Edwin C., Kansas City
White, Stoughton F., Kansas City
Wiley, J. LaRue, Kansas City
Williams, Delon A., Kansas City
Williams, Joseph C., Kansas City
Williams, L. E., Kansas City
Williams, Starks, Kansas City

Williams, Vincent T., Kansas City
Willoughby, Jean B., Kansas City
Winer, Herbert J., Kansas City
Wortmann, Robert F., Kansas City
Wright, R. Paul, Kansas City
Wu, William Q., Kansas City

Eighth Councilor District—49

Barnett, C. H., Bolivar
Bowman, Melvin C., Neosho
Brasher, Charles A., Mt. Vernon
Burney, W. S., Miller
Callaway, Guy D., Jr., Springfield
Capetti, Alex P., Aurora
Coffelt, Kenneth C., Springfield
DeTar, B. E., Joplin
Ferguson, John P., Springfield
Ferguson, R. M., Webb City
Ferrell, Thos. E., Springfield
Grantham, Samuel Ashby, Joplin
Griffin, Evelyn, Buffalo
Griffin, O. A., Buffalo
Hall, Durwood G., Springfield
H'Doubler, Francis Todd, Springfield
Holtzman, Samuel, Joplin
Hoover, H. Lee, Springfield
Isbell, Charles H., Carthage
Knabb, Kenneth E., Springfield
Lockhart, Charles E., Springfield
McCallum, A. J. C., Aurora
McIntire, Emery J., Carthage
Macdonnell, Thomas M., Marshfield
Maples, Floyd H., Mt. Vernon
Musick, J. D., Springfield
Napper, Marvin L., Springfield
Newman, Mary, Cassville
Park, W. I., Springfield
Peterson, Stanley S., Springfield
Rainwater, E. H., Springfield
Russell, Earl D., Springfield
Schulte, G. A., Joplin
Schwartz, Eugene J., Springfield
Scorse, Sidney W., Joplin
Sewell, Walter S., Springfield
Silsby, Don J., Springfield
Silsby, Harry D., Springfield
Smith, Carlie Souter, Springfield
Threadgill, J. M., Forsyth
Tillman, Walter W., Jr., Springfield
Wakeman, J. N., Springfield
White, R. Ned, Springfield
Whitten, M. Foster, Carthage
Williams, John W., Jr., Springfield
Wommack, Fred H., Crane
Wood, George H., Carthage
Wright, G. W., Webb City
Yancey, Daniel L., Springfield

Ninth Councilor District—10

Burns, T. J., Houston
Carrington, H. W., Lebanon
Cooper, C. W., Thayer
Davis, H. H., Rolla
Hurst, B. B., Lebanon
Kozal, F. L., Belle
Russell, Barbara E., Rolla
Smith, Rollin H., West Plains
Stricker, E. A., St. James
Summers, Jacob H., Lebanon

Tenth Councilor District—12

Baldwin, Paul, Kennett
Bull, Ben M., Ironton
Crites, Edw., Sedgewickville
Crowe, John T., Cape Girardeau
Elrod, D. B., Cape Girardeau
Finney, W. O., Chaffee
Herbert, Charles T., Cape Girardeau
McDonald, Eugene F., Jackson
Rapp, Harold B., Cape Girardeau
Roebber, Harry M., Bonne Terre
Seabaugh, D. I. L., Jackson
Wolff, Paul George, Cape Girardeau

Guest Speakers—9

Crile, George, Cleveland
Garland, L. Henry, San Francisco
Hess, Elmer, Erie
Jackson, Robert L., Columbia
Murphy, Francis D., Milwaukee
Page, Irvine H., Cleveland
Soloff, Louis Alexander, Philadelphia
Thorek, Philip, Chicago
White, Priscilla, Boston

Guest Physicians—21

Alphin, Thomas H., Columbia
Blankenship, Charles F., Kansas City
Comeau, Richard, Dexter
Davis, Leonard L., St. Louis
Eubank, David F., Raytown
Helwig, F. C., Kansas City
Kells, William A., Grandview
Lehmann, E. B., Kansas City
Levine, Edwin R., Chicago
McCroskey, Charles H., Kansas City
Mitchell, Raymond E., Springfield
Plowman, Edward M., Dubuque
Royce, James J., Noel
Shepard, R. M., Tulsa
Sweany, Henry C., Mt. Vernon
Swerdlow, Martin, Kansas City
Thomas, C. Y., Kansas City
Walker, Leonard, Kansas City
Walter, C. W., St. Paul
Welch, E. E., San Antonio
Williams, Maysil M., Kansas City

There were registered 46 interns, 11 medical students, 6 student technicians, 176 exhibitors, 149 medical technologists and 45 guests. Total registration 994.

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Indicated wherever oral cortisone or hydrocortisone is effective • Available in 5 mg. tablets in bottles of 30 and 100 • Usual dosage is ½ to 1 tablet three or four times daily

Delta-Cortef*

Less sodium retention, less potassium depletion

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AMERICAN MEDICAL ASSOCIATION

Annual Banquet

At the Annual Banquet on Tuesday evening, officers and the guest speaker were seated at the speakers table. Following dinner, the Central High School Concert Choir of St. Joseph, presented a choral presentation under the direction of Mr. Marvin Gench, Jr. Dr. Petersen presented the gavel to Dr. Buhler at the banquet. Elmer Hess, M.D., Erie, Pa., President-elect of the American Medical Association, was the guest speaker. On Wednesday following the House of Delegates, Dr. Buhler congratulated Carl F. Vohs, M.D., St. Louis, the newly elected President-elect.

Towns and County

A

Adrian, Bates County
Affton, St. Louis County*
Albany, Gentry County
Altenburg, Perry County
Anderson, McDonald County
Appleton City, St. Clair County
Arnold, Jefferson County
Ash Grove, Greene County
Ashland, Boone County
Aurora, Lawrence County
Ava, Douglas County

B

Bakersfield, Ozark County
Ballwin, St. Louis County*
Barnard, Nodaway County
Barnhart, Jefferson County
Beaufort, Franklin County
Belle, Maries County
Belton, Cass County
Berkeley, St. Louis County*
Bethany, Harrison County
Birch Tree, Shannon County
Bismarck, St. Francois County
Bloomfield, Stoddard County
Blue Springs, Jackson County
Bolckow, Andrew County
Bolivar, Polk County
Bonne Terre, St. Francois County
Boonville, Cooper County
Bourbon, Crawford County
Bowling Green, Pike County
Branson, Taney County
Brashear, Adair County
Braymer, Caldwell County
Breckenridge, Caldwell County
Brentwood, St. Louis County*
Bridgeton, St. Louis County*
Brookfield, Linn County
Brookline Station, Greene County
Browning, Linn County
Brunswick, Chariton County
Bucklin, Linn County
Buffalo, Dallas County
Bunceton, Cooper County
Burlington Junction, Nodaway County
Butler, Bates County
Bynumville, Chariton County

C

Cabool, Texas County
California, Moniteau County
Camdenton, Camden County
Cameron, Clinton County
Campbell, Dunklin County
Camp Crowder (See St. Louis County)
Canton, Lewis County
Cape Girardeau, Cape Girardeau County
Cardwell, Dunklin County
Carl Junction, Jasper County
Carrollton, Carroll County
Carthage, Jasper County
Caruthersville, Pemiscot County
Cassville, Barry County
Cedar Hill, Jefferson County
Centerville, Reynolds County
Centralia, Boone County
Chaffee, Scott County
Charleston, Mississippi County
Chesterfield, St. Louis County*
Chillicothe, Livingston County
Clarksville, Pike County
Clayton, St. Louis County*
Clinton, Henry County
Coatsville, Schuyler County
Cole Camp, Benton County
Columbia, Boone County
Conception Junction, Nodaway County
Concordia, Lafayette County
Conway, Laclede County
Cooter, Pemiscot County
Crane, Stone County
Creve Coeur, St. Louis County*
Crocker, Pulaski County
Crystal City, Jefferson County
Cuba, Crawford County

D

Dearborn, Platte County
Delta, Cape Girardeau County
Desloge, St. Francois County
DeSoto, Jefferson County
Dexter, Stoddard County
Diamond, Newton County
Dixon, Pulaski County
Doniphan, Ripley County
Downing, Schuyler County
Drexel, Cass County

E

East Prairie, Mississippi County
Edgerton, Platte County
Edina, Knox County
Eldon, Miller County
El Dorado Springs, Cedar County
Ellington, Reynolds County
Elsberry, Lincoln County
Essex, Stoddard County
Eugene, Cole County
Eureka, St. Louis County*
Excello, Macon County
Excelsior Springs, Clay County

F

Fairfax, Atchison County
Farmington, St. Francois County
Faucett, Buchanan County
Fayette, Howard County
Fenton, St. Louis County*
Ferguson, St. Louis County*
Festus, Jefferson County
Fillmore, Andrew County
Flat River, St. Francois County
Florissant, St. Louis County*
Forsyth, Taney County
Fredericktown, Madison County
Fulton, Callaway County

G

Gallatin, Daviess County
Galt, Grundy County
Garden City, Cass County
Gashland, Clay County
Gideon, New Madrid County
Glasgow, Howard County
Glendale, St. Louis County*
Golden City, Barton County
Goodman, McDonald County
Gordonville, Cape Girardeau County
Granby, Newton County
Grandview, Jackson County
Grant City, Worth County
Green City, Sullivan County
Greenfield, Dade County
Green Ridge, Pettis County
Greentop, Schuyler County

H

Hale, Carroll County
Hamilton, Caldwell County
Hannibal, Marion County
Harrisonville, Cass County
Hartville, Wright County
Hayti, Pemiscot County
Herculaneum, Jefferson County
Hermann, Gasconade County
Hermitage, Hickory County
Hickman Mills, Jackson County
Higbee, Randolph County
Higginsville, Lafayette County
Hillsboro, Jefferson County
Holden, Johnson County
Hopkins, Nodaway County
Hornersville, Dunklin County
Houston, Texas County
Houstonia, Pettis County
Humansville, Polk County
Hume, Bates County
Huntsville, Randolph County

I

Iantha, Barton County
Illmo, Scott County
Independence, Jackson County
Ironton, Iron County

J

Jackson, Cape Girardeau County
Jefferson Barracks, St. Louis County*
Jefferson City, Cole County
Jennings, St. Louis County*
Joplin, Jasper County

K

Kahoka, Clark County
Kansas City, Jackson County
Kennett, Dunklin County
Keytesville, Chariton County
Kimmswick, Jefferson County
King City, Gentry County
Kirksville, Adair County
Kirkwood, St. Louis County*
Knob Noster, Johnson County
Knox City, Knox County
Koch, St. Louis County*

L

La Belle, Lewis County
Laddonia, Audrain County
Ladue, St. Louis County*
La Grange, Lewis County
Lakeview Heights, Benton County
Lamar, Barton County
La Monte, Pettis County
Lancaster, Schuyler County
La Plata, Macon County
Lathrop, Clinton County
Lawson, Ray County
Leadwood, St. Francois County
Leasburg, Crawford County
Lebanon, Laclede County
Lee's Summit, Jackson County
Lemay, St. Louis County*
Lexington, Lafayette County
Liberty, Clay County
Licking, Texas County
Lilbourn, New Madrid County
Lincoln, Benton County
Lockwood, Dade County
Louisiana, Pike County

M

Macks Creek, Camden County
Macon, Macon County
Malden, Dunklin County
Manchester, St. Louis County*
Mansfield, Wright County
Maplewood, St. Louis County*
Marceline, Linn County
Marionville, Lawrence County
Marshall, Saline County
Marshfield, Webster County
Marston, New Madrid County
Marthasville, Warren County
Martin City, Jackson County
Maryville, Nodaway County
Maysville, DeKalb County
Mayview, Lafayette County
Mendon, Chariton County
Mexico, Audrain County
Miami, Saline County
Middletown, Montgomery County
Milan, Sullivan County
Miller, Lawrence County
Moberly, Randolph County
Mokane, Callaway County
Monett, Barry County
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Montgomery City, Montgomery County
Montrose, Henry County
Morehouse, New Madrid County
Morrisville, Polk County
Mound City, Holt County
Mountain Grove, Wright County
Mountain View, Howell County
Mount Moriah, Harrison County
Mount Vernon, Lawrence County

N

Naylor, Ripley County
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Newburg, Phelps County
New Florence, Montgomery County
New Franklin, Howard County
New Haven, Franklin County
New London, Ralls County
New Madrid, New Madrid County
Niangua, Webster County
Norborne, Carroll County
Normandy, St. Louis County*
North Kansas City, Clay County
Norwood, Wright County

O

Oak Grove, Jackson County
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Oran, Scott County
Oregon, Holt County
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Osceola, St. Clair County
Overland, St. Louis County*
Owensville, Gasconade County
Ozark, Christian County

P

Pacific, Franklin County
Palmyra, Marion County
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Parma, New Madrid County
Pattonsburg, Daviess County
Pattonville, St. Louis County*
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Peculiar, Cass County
Perry, Ralls County
Perryville, Perry County
Pickering, Nodaway County
Piedmont, Wayne County
Pierce City, Lawrence County
Pilot Grove, Cooper County
Pineville, McDonald County
Platte City, Platte County
Plattsburg, Clinton County
Pleasant Hill, Cass County
Polo, Caldwell County
Poplar Bluff, Butler County
Portage des Sioux, St. Charles County
Portageville, New Madrid County
Potosi, Washington County
Prairie Hill, Chariton County
Princeton, Mercer County

R

Raytown, Jackson County
Reeds, Jasper County
Reeds Spring, Stone County
Republic, Greene County
Rich Hill, Bates County
Richland, Pulaski County
Richmond, Ray County
Richmond Heights, St. Louis County*
Ridgeway, Harrison County
Rivermines, St. Francois County
Roanoke, Howard County
Robertson, St. Louis County*
Rockaway Beach, Taney County
Rock Hill, St. Louis County*
Rockport, Atchison County
Rolla, Phelps County
Rosendale, Andrew County
Rothville, Chariton County
Russellville, Cole County

S

St. Ann, St. Louis County*
St. Charles, St. Charles County
St. Clair, Franklin County
Ste. Genevieve, Ste. Genevieve County
St. James, Phelps County
St. Joseph, Buchanan County
St. Louis City*
St. Marys, Ste. Genevieve County
Salem, Dent County
Salisbury, Chariton County
Sappington, St. Louis County*
Sarcoxie, Jasper County
Savannah, Andrew County
Sedalia, Pettis County
Sedgewickville, Bollinger County
Senath, Dunklin County
Seneca, Newton County
Seymour, Webster County
Shelbina, Shelby County
Shelbyville, Shelby County
Shrewsbury, St. Louis County*
Sikeston, Scott County
Silex, Lincoln County
Slater, Saline County
Smithton, Pettis County
Smithville, Clay County
South West City, McDonald County
Spickard, Grundy County
Springfield, Greene County
Stanberry, Gentry County
Steele, Pemiscot County
Steelville, Crawford County
Stella, Newton County
Stockton, Cedar County
Stoutland, Camden County
Strafford, Greene County
Strasburg, Cass County
Sturgeon, Boone County
Sullivan, Franklin County
Sumner, Chariton County
Sweet Springs, Saline County

T

Tarkio, Atchison County
Thayer, Oregon County
Tina, Carroll County
Tindall, Grundy County
Tipton, Moniteau County
Trenton, Grundy County
Troy, Lincoln County

U

Union, Franklin County
Unionville, Putnam County
University City, St. Louis County*
Urbana, Dallas County
Urich, Henry County

V

Valley Park, St. Louis County*
Van Buren, Carter County
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Harell, Alex, St. Louis
Harford, Carl G., St. Louis
Harkins, William B., St. Louis
Harkness, Harry, Warrensburg
Harland, R. E., Ironton
Harless, Morris S., Kansas City
Harmann, Martin F., St. Louis
Harms, Florian L., Salisbury
Harnagel, Dana Lee, Phoenix, Ariz.
(Member St. Louis Medical Society)
Harned, Bert W., Kansas City
Harrell, Henry J., Morrisville
Harrington, William J., St. Louis
Harris, Charles W., St. Louis
Harris, Downey L., St. Louis
Harris, Hinman A., University City
Harris, Irwin J., St. Louis
Harris, Solon P., St. Louis
Harrison, John F., Mexico
Harrison, Lee B., St. Louis
Harrison, Stanley L., St. Louis
Hart, Martin M., Salem
Hart, Pearl V., Coatsville
Hartigan, Frank X., St. Joseph
Harting, Hugh R., St. Louis
Hartman, Howard E., Scott A.F.B., Ill.
(Member St. Louis Medical Society)
Hartman, Paul T., St. Louis
Hartmann, Alexis F., St. Louis
Hartnett, Dalton C., St. Louis
Hartnett, Leo J., St. Louis
Hartwell, Basil O., Drexel
Hartwig, Frederick H., Kansas City
Hartwig, John A., St. Louis
Harwell, James L., Poplar Bluff
Harwell, J. Lester, Poplar Bluff
Hashinger, Edward H., Kansas City
Haskell, Ralph E., Norborne
Haskins, Arthur L., St. Louis
Hassett, Henry A., St. Louis
Hasson, Robert, Moberly
Hata, Daikichi, Boonville
Hatcher, Dock T., Jr., Butler
Haw, Marvin T., Jr., Lafayette, Ind.
(Member Mineral Area Society)
Hawk, Bray O., St. Louis
Hawker, William D., St. Louis
Hawkins, George L., Jr., St. Louis
Hawkins, George W., Salisbury
Hayden, Loyola F., St. Louis
Haynes, Lee, Kansas City
Haynes, Pugh, Jr., St. Louis
Haynes, Robert Clark, Marshall
Haynes, Robert C., Jr., Shrewsbury, Mass.
(Member Saline County)
Haynes, Solon E., Kansas City
Hazen, Robert M., San Antonio, Texas
(Member Jackson County)
H'Doubler, Francis T., Springfield
H'Doubler, Francis T., Jr., Springfield
Hearst, Allen L., Kansas City
Heid, Lloyd L., St. Louis
Heideman, Alvah G., St. Louis
Heideman, Milo L., St. Louis
Heifetz, Carl J., St. Louis
Heilbrunn, Max, Lockwood
Heimburger, Leroy F., Springfield
Heinbecker, Peter, St. Louis
Heinemann, Sol, St. Louis
Helbing, Edward J., St. Louis
Helbing, Harry H., St. Louis
Heller, B. Marcus, Kansas City
Hellweg, Charles E., Mt. Vernon
Helm, James O., New Florence
Helman, Richard G., Kansas City
Henderlite, John W., St. Louis
Hendin, Aaron, University City
Hendren, Glenn W., Liberty
Hengen, Henry E., Pattonville
Henke, Charles F., St. Louis
Hennelly, John J., St. Louis
Hennerich, Walter E., St. Louis
Henrickson, H. O., Poplar Bluff
Henrickson, Hardin M., Poplar Bluff
Henrickson, William E., Poplar Bluff
Henry, Clarke L., Kansas City
Henry, Clifford E., Kirksville

Henry, Schubert D., Kansas City
Hensley, Daniel R., Wardell
Henschel, Eugene V., St. Louis
Herbert, Charles T., Cape Girardeau
Herbst, Frank, Kansas City
Herman, Allen I., St. Joseph
Herman, Morris, St. Louis
Herrick, Harold C., St. Louis
Herrman, George V., Kansas City
Hertel, Albert L., St. Louis
Herzog, Gustav G. A., Cuba
Hess, Paul D., Kansas City
Hetlage, Louis P., Troy
Heusler, Anton F., St. Louis
Hewitt, Walter R., St. Louis
Heyer, Oscar C., St. Louis
Hibbard, Blaine Z., Kansas City
Hickerson, John C., Independence
Hickerson, William H., Independence
Hickey, Robert F., St. Louis
Hickman, Eugene A., St. Louis
Hicks, Edward A., Troy
Higgins, Robert S., Kansas City
Hildreth, H. Rommel, St. Louis
Hill, Jack H., Kansas City
Hill, Jesse N., Independence
Hill, John J., Ft. Worth, Texas
(Member West Central Society)
Hill, Roland, St. Louis
Hines, Arthur A., St. Louis
Hines, Paul, Kansas City
Hink, Frederick W., Kansas City
Hirsch, Albert, Middletown
Hite, Henry A., Green Ridge
Hobart, Carl A. B., St. Louis
Hobbs, Alonzo G., St. Louis
Hobbs, Clarence L., St. Louis
Hobbs, Earl B., Smithville
Hobbs, John E., St. Louis
Hoctor, Emmett F., Farmington
Hodge, Robert H., North Kansas City
Hodgson, Frank H., Kansas City
Hodgson, Robert B., Kansas City
Hoefer, Walter H. V., St. Louis
Hoelscher, Harold F., Warrenton
Hoeper, Samuel D., Kansas City
Hoerchler, T. J., Shelbina
Hoffman, Jacob S., Kansas City
Hoffmann, Augustin D., St. Louis
Hoffmann, R. Lee, Kansas City
Hoffmann, Ronald E., Address Unknown
(Member St. Louis Medical Society)
Hofsommer, Armin C., Webster Groves
Hofstatter, Leopold, St. Louis
Hofstatter, Lilli, St. Louis
Hogan, Daniel F., Kansas City
Hogan, Frank E., Mound City
Hogeboom, George W., Springfield
Hogg, Garrett S., Jr., Cabool
Hogue, Frank S., Kansas City
Holbrook, Charles K., St. Louis
Holbrook, Walter F., Kansas City
Holden, Raymond F., St. Louis
Holdenried, William E., St. Louis
Holliday, Morgan Lee, Fillmore
Hollingsworth, Ray S., Clinton
Hollo, Vencel W., St. Louis
Hollweg, Kenneth C., Kansas City
Holman, H. Frank, Kansas City
Holman, Jurney H., Unionville
Holmes, David R., Warrensburg
Holmes, Lemuel I., Miller
Holmes, Prince Albert, Mt. Vernon
Holscher, Edward C., St. Louis
Holt, Earl P., Jr., St. Louis
Holton, Edward B., Independence
Holtzman, Samuel, Joplin
Homan, J. S., St. Louis
Honich, Nicholas J., St. Louis
Hook, Waller G., Kansas City
Hooker, John H., Clarksville
Hoover, H. Lee, Jr., Springfield
Hope, James L., Lebanon
Hopkins, F. G., Gideon
(Member Dunklin County)
Hopkins, Thomas A., St. Louis
Hopkins, Thomas J., Sedalia
Hopkins, Thomas S., Sedalia
Hornback, Edward R., Joplin
Hornback, George A., Hannibal
Horner, John L., St. Louis
Horst, Otto C., Springfield
Horton, James D., Springfield
Horton, Ray B., North Kansas City
Horwitz, Irwin B., St. Louis
Hosto, Leland E., St. Louis
Houck, Russell M., Richmond, Va.
(Member Clay County)
Houston, Vincent T., St. Louis
Howard, Walter M., Joplin
Howden, Thomas L., St. Joseph
Howe, Louis F., St. Louis
Hoxie, George H., Berkeley, Calif.
(Member Jackson County)

Hrdlicka, Victor E., St. Louis
Huber, Erwin T., St. Louis
Huber, Lasley E., Moberly
Huck, Frank F., Fenton
Huckstep, Robert A., Farmington
(Member St. Louis Medical Society)
Hudson, G. R., Kirksville
Huffman, Elston R., Denver, Colo.
(Member Greene County)
Huggins, Albert M., St. Louis
Hughes, Clarence O., Ferguson
Hughes, Edgar O., Dixon
Hughes, Gerald E., Kansas City
Hughes, Judson M., St. Joseph
Hughes, Robert G., Creve Coeur
Hughes, Shelby B., Clinton
Hulbert, Bernard, St. Louis
Hull, Walter S., Faucett
Humberd, Charles D., Barnard
Hummel, Anton J., St. Louis
Humphrey, Harvey A., St. Louis
Humphrey, Henry M., Brashear
Humphreys, Edward T., Boonville
Hungate, Carroll P., Kansas City
Hunt, Claude J., Kansas City
Hunt, John W., Jr., Leadwood
Hunt, Lloyd H., Salem
Hunt, W. J., St. Joseph
Hunter, Charles H., St. Louis
Hunter, James R., Fulton
Hunter, Martin P., Kansas City
Hurst, Ben B., Lebanon
Hurst, W. W., Joplin
Hurwitt, Frank, Kansas City
Husted, George W., Parma
Hutchinson, James H., Jr., St. Louis
Hutto, A. Herman, St. Louis
Hutton, Joseph L., St. Louis
Hux, William J., Essex
Hyman, Anna, St. Louis
Hyndman, Charles E., St. Louis

I

Ibach, Harold F., Kansas City
Ide, Lucien W., St. Joseph
Imes, Clifford H., San Francisco, Calif.
(Member Ozarks Medical Society)
Imes, Elvin D., Maryville
Ingham, Walton C., Kansas City
Inkley, John J., St. Louis
Irick, Carl C., Webster Groves
Irland, Robert D., Kansas City
Irwig, Fred, Kansas City
Irwin, William F., Leasburg
Isbell, Charles H., Carthage
Israel, Milton R., St. Louis
Ittner, George W., Jr., St. Louis
Ivy, Henry B., Springfield
Izmirlian, Grant, St. Louis

J

Jackson, L. S., Joplin
Jackson, Robert L., Columbia
Jackson, William R., Kansas City
Jackson, William Raymond, Maryville
Jacob, Walter, Kansas City
Jacobs, Charles C., St. Louis
Jacobs, Frederick A., St. Louis
Jacobs, Morton, Kansas City
Jacobson, Donald J., Address Unknown
(Member St. Louis Medical Society)
Jaeger, Joseph N., Jackson
Jaime, Nicholas, Kansas City
James, Edward D., Joplin
James, Joseph D., Springfield
James, Norman A., St. Louis
James, Otis E., Jr., Kansas City
James, Robert M., Joplin
James, William M., St. Louis
Janney, James G., Jr., Clayton
Jansen, Robert, Kansas City
Janzen, Erwin M., St. Louis
Jarvis, James A., Kansas City
Jarvis, William J., Kansas City
Jaudon, Joseph C., St. Louis
Javaux, Everett J., St. Louis
Jean, J. Ted, St. Louis
Jeans, Virgil, Joplin
Jeck, Howard S., Jr., St. Joseph
Jeffries, Robert C., Kansas City
Jenkins, Joseph M., St. Charles
Jenkins, Paul A., Lebanon
Jennett, Harry N., Kansas City
Jennett, James H., Kansas City
Jennings, Ethlyn C., North Kansas City
(Member Platte County)
Jennings, Perry W., Canton
Jennings, Robert J., Windsor
Jensen, J. Ernest, St. Louis
Jim, Robert T. S., St. Louis
Johns, G. A., Marshall
Johns, William C., Kansas City
Johnson, C. Lawrence, Kansas City

Johnson, Charles H., St. Louis
Johnson, Charles R., Monroe City
(Member Marion-Ralls-Shelby County)
Johnson, Charles S., Warrensburg
Johnson, Edgar W., Kansas City
Johnson, Edgar W., Jr., Kansas City
Johnson, Edward M., Macon
Johnson, Ferrell H., Lebanon
Johnson, Frank C., Doniphan
Johnson, Glenn D., Maysville
Johnson, Grover C., Marthasville
Johnson, John E., Kansas City
Johnson, M. C., Richmond
Johnson, Mitchell D., Ferguson
Johnson, Paul A., Kansas City
Johnson, Q. Ray, Jr., Louisiana
Johnson, Richard E., Columbia
Johnson, Roy, Ferguson
Johnson, Thomas M., Kansas City
Johnson, Warford B., Springfield
Johnson, William A., Kansas City
Johnson, William F., Springfield
Johnston, Joseph L., Springfield
Johnstone, John, Jr., St. Louis
Johnstone, Paul N., Kansas City
Jolley, J. Frank, Mexico
Jolly, Benjamin N., Mexico
Jolly, William H., Mexico
Jonas, Harry S., Jr., St. Louis
Jones, Andrew B., St. Louis
Jones, Augustin, St. Louis
Jones, Dorothy J., Clayton
Jones, Edward E., Lilbourn
Jones, Edward S., Harrisonville
Jones, Garnett, St. Clair
(Member St. Louis County)
Jones, George H., Kansas City
Jones, Grey, St. Louis
Jones, James B., Brentwood
Jones, John B., Kirksville
Jones, Kneeland P., Kansas City
Jones, Otey S., St. Louis
Jones, Paul L., Flat River
Jones, Ralph H., Marshall
Jones, Richard A., St. Louis
Jones, Theodore R., Kansas City
Jones, Vincent L., St. Louis
Jones, William E., St. Louis
Jordan, Edward J., St. Louis
Jordan, Ray B., Windsor
Jordan, Walter R., St. Louis
Jorstad, Louis H., St. Louis
Joseph, Donald J., San Francisco, Calif.
(Member St. Louis Medical Society)
Joseph, Harold J., St. Louis
Joslyn, Harold L., St. Louis
Jost, Charles A., St. Louis
Juden, Alexander G., Cape Girardeau
Judy, Joseph D., Ferguson
Jungk, Carl G. W., St. Louis
Justus, John B., Kansas City

K

Kahn, Lawrence, St. Louis
Kaiser, Clarence D., Hayti
Kallenbach, G. P., Mexico
Kamakas, Nicholas, St. Louis
Kampschmidt, August W., Address Unknown
(Member Boone County)
Kanagowa, H., Jefferson City
Kane, Clyde E., St. Louis
Kane, R. Emmet, St. Louis
Kantor, Julius M., Kansas City
Kantor, Samuel, Kansas City
Kaplan, Albert, Normandy
Kappesser, Netajean B., St. Louis
Kappesser, Roland C., St. Louis
Karandjeff, A. D., St. Louis
Karl, Michael M., St. Louis
Karraker, Alvan G., Farmington
Kaskie, Clifford R., Clayton
Kasten, Melvin C., University City
Katz, Milton, Kansas City
Katz, Samuel D., St. Louis
Kauffman, Ruth, Versailles
Kaul, Philip G., Kansas City
Kealhofer, George C., Kansas City
Kearney, Elmer F., Oregon
Keating, John U., Tarpon Springs, Fla.
(Member St. Louis Medical Society)
Keeble, Charles B., St. Louis
Keeler, James E., Kansas City
Keffler, Karl L., St. Louis
Kehoe, J. Joseph, St. Louis
Keim, John H., Cape Girardeau
Keim, John P., St. Louis
Keith, Willis E., Kansas City
Keller, Joseph M., St. Louis
Keller, Louis, St. Louis
Keller, Maurice J., St. Louis
Keller, Robert M., Owensville
Kellett, John G., Webster Groves
Kelley, Gilbert B., Savannah

Kelley, Isaac D., St. Louis
Kelley, Ralph R., Savannah
Kelley, Robert W., St. Louis
Kelley, Walter L., Affton
Kelling, Douglas G., Waverly
Kelling, George A., Waverly
Kelling, Jordan, Waverly
Kelly, Charles A., St. Louis
Kelly, Eugene H., Kansas City
Kelly, John Burton, Houston
Kelly, Marshall W., Jefferson City
Kelly, R. Emmet, St. Louis
Keltner, Raymond O., Raytown
Kempinsky, Warren H., St. Louis
Kenamore, Bruce, St. Louis
Kendis, Joseph B., St. Louis
Kennedy, Francis L., St. Louis
Kennedy, John L., St. Louis
Kennedy, R. W., Marshall
Kenney, Verna E., Joplin
Kent, Bela Kaszas, Kansas City
Kent, Clifford F., Kansas City
Kerr, David N., St. Louis
Kerr, Frank T., Monett
Kerr, Russell, Kansas City
Kessler, Joseph J., St. Louis
Ketcham, William M., Kansas City
Ketron, Marvin B., Kansas City
Kettelkamp, George D., St. Louis
Kettner, Edward G., Kansas City
Key, J. Albert, St. Louis
Keyes, Edward Lawrence, St. Louis
Kibbe, Edgar A., California
Kibbe, John H., Monroe City
(Member Marion-Ralls-Shelby County)
Kieber, R. W., St. Joseph
Kieffer, Roland S., St. Louis
Kieffer, Victor B., Jr., St. Louis
Kiehl, Katharine, Joplin
Kienberger, Paul A., Kansas City
Kiene, Richard H., Kansas City
Kienzle, Edward C., St. Louis
Kilker, Clarence H., St. Louis
Kilker, Donald E., St. Louis
Killion, John J., Portageville
Killough, John H., Columbia
Kimball, Merritt H., Kansas City
Kimberlin, Herbert C., Trenton
Kimelman, Nathan, St. Louis
Kimes, Ira D., Cameron
Kinder, James A., Cape Girardeau
King, Elbert R., Boise, Idaho
(Member West Central Counties)
King, Eustace E., III, St. Louis
King, Francis C., St. Louis
King, John V., St. Louis
King, Robert B., St. Louis
King, Samuel J., St. Louis
King, Walter R., Kansas City
Kingsbury, Helen, Kansas City
Kingsland, Robert C., Clayton
Kinner, Helmuth M., St. Louis
Kinsella, Dalton L., Jr., Miami, Fla.
(Member St. Louis Medical Society)
Kinsella, Edward D., St. Louis
Kinsella, R. A., St. Louis
Kinsella, Ralph A., Jr., St. Louis
Kirchner, Walter C. G., St. Louis
Kirk, Charlie W., Hopkins
Kirkpatrick, Milton E., Kansas City
Kirschman, Robert E., Joplin
Kirstein, Melvin B., St. Louis
Kirtz, Louis P., St. Louis
Kister, George E., St. Charles
Kistner, William F., University City
Kitchell, Wm. Everett, St. Clair
Kitchen, William M., Kansas City
Klaff, Daniel D., St. Louis
Klebba, Larry B., Jefferson City
Klein, Andrew G., St. Louis
Klein, Arnold G., St. Louis
Klein, Arthur, San Antonio, Texas
(Member St. Louis Medical Society)
Klein, Bert H., St. Louis
Klein, Edward H., Kansas City
Klein, Harry A., St. Louis
Kleinschmidt, Clinton, St. Louis
Klemme, Roland M., St. Louis
Klenk, Charles L., St. Louis
Klepinger, Dayton P., Kansas City
Klingner, George M., Springfield
Klink, Lon Benjamin, Ft. Monroe, Va.
(Member Lincoln-St. Charles County)
Klippel, Allen P., St. Louis
Klippel, Bernhardt W., St. Louis
Kloeppel, Carl F., Kirkwood
Klym, Nicholas, St. Louis
Knabb, Arthur D., Springfield
Knabb, Harris, Springfield
Knabb, Henry F., Springfield
Knabb, Henry F., Jr., Springfield
Knabb, Kenneth E., Springfield
Knapp, Rudolph, Golden City
Kneal, E. Ellsworth, St. Louis
Kneibert, Fred L., Poplar Bluff
Knepper, P. A., St. Joseph
Knese, Luke A., St. Louis
Knight, Franklin P., St. Louis
Knight, John S., Kansas City
Knight, Lyle B., Lee's Summit
Knight, William A., St. Louis
Knight, William A., Jr., St. Louis
Knoch, H. Kermit, Kansas City
Knoke, Frederick W., St. Louis
Knowles, Harry P., Rockaway Beach
Knowlton, Norman P., St. Louis
Knox, Earl R., Kansas City
(Member Clay County)
Koch, Otto W., Brentwood
Koch, Robert E., Clayton
Koehler, Charles A., Kansas City
Koehler, John W., Joplin
Koenig, Frank J., Kansas City
Koenig, George H., St. Petersburg, Fla.
(Member St. Louis Medical Society)
Koenig, Karl F., St. Louis
Koerner, Kenneth A., Clayton
Koessel, Arthur W., St. Louis
Kohler, Eugene J., St. Louis
Kohler, Louis H., St. Louis
Kohn, Cecil M., Kansas City
Komanetsky, W. M., St. Louis
Konzelmann, John A., St. Louis
Koon, Bernard T., St. Louis
Kopp, Jules H., St. Louis
Kopp, Leonard J., St. Louis
Koppenbrink, Walter E., Jr., Higginsville
Korn, Robert L., Clayton
Korth, William M., Kansas City
Kotkis, A. J., Brentwood
Kotner, Lawrence M., St. Louis
Kountz, William B., St. Louis
Kouri, Martin F., St. Louis
Koutsoumpas, William V., St. Louis
Kovitz, Louis, Kansas City
Kowert, Edward H., St. Louis
Kozal, Francis L., Belle
Kraft, Edward O., Brentwood
Kraft, Jacob, Kansas City
Kramer, Fred, St. Louis
Kramer, Scott G., St. Louis
(Member South Central Counties)
Kramolowsky, Helmuth H., St. Louis
Kraner, Justin F., St. Louis
Kranson, Seymour J., Independence
Kratz, Paul E., Cape Girardeau
Krause, G. Lynn, St. Louis
Krebs, Joseph M., St. Louis
Krebs, Otto S., St. Louis
Krieger, John L., St. Louis
Kromer, Charles, St. Louis
Kubitschek, Paul F., St. Louis
Kuebrich, Thomas C., Ferguson
Kuenzi, Donald E., Gashland
Kuhn, John R., Jr., Joplin
Kuhn, William F., II, Kansas City
Kulowski, Jacob, St. Joseph
Kuritz, Albert B., Milwaukee, Wisc.
(Member St. Louis County)
Kurth, Robert K., St. Louis
Kurtzeborn, Edwin E., Tampa, Fla.
(Member St. Louis Medical Society)
Kurz, Rudolph F., St. Louis
Kuttner, Marianne, St. Louis
Kyger, Fred B., Kansas City
Kyner, Thomas A., Kansas City

L

Lachance, Leopold, Centralia
Lacy, N. Eugene, Kansas City
Ladd, Charles B., St. Louis
Ladenson, Roland P., Columbia
LaDriere, Raymond J., St. Louis
Laffoon, France L., Raytown
LaHue, L. D., Butler
Lais, Lyman W., Kansas City
Lakes, John D., St. Louis
Lally, James J., Kansas City
Lam, Robert L., St. Louis
Lamar, Frederick C., Kansas City
Lamar, Robert F., Kansas City
Lamb, Wanda, St. Louis
Lamb, Woodrow M., Caruthersville
Lambert, Marian, Address Unknown
(Member Grand River Society)
Lamke, Charles M., Columbia
Lammert, Thomas K., Hartford, Conn.
(Member St. Louis Medical Society)
Lampe, Elfred H., St. Louis
Lamson, Roy C., Neosho
Lamy, John E., Sedalia
Landau, Daniel B., Hannibal
Landis, George K., Kansas City
Landree, James C., St. Louis
Lane, Clinton W., St. Louis
Laney, Ronald L., Webb City
Langan, William J., Jr., St. Louis
Lange, Adolph C., St. Louis
Langenbach, Alfred M., St. Louis
Langhus, Melvin O., North Kansas City
Langston, W. R., Springfield
Lanier, Andrew S., Fulton
Lanier, Earl W., St. Louis
Lanier, Patricia F., Fulton
Laning, J. H., Kansas City
Lankford, Harold D., Mexico
Lanning, Richard C., Ste. Genevieve
Lanning, Robert J., Hannibal
Lanning, Robert W., Ste. Genevieve
Lansche, Elmer A., St. Louis
Lapi, Angelo, Kansas City
Lapi, Ruth M., Kansas City
Lapp, Harry C., Kansas City
Lapp, John G., Kansas City
Larimore, Joseph W., St. Louis
Larkin, Rosemary R., St. Louis
Larsen, Kenneth V., St. Louis
Lassar, Gilbert N., St. Louis
Latham, Kenyon S., California
Latham, Raymond W., Kansas City
Lau, Gustav A., St. Joseph
Laurenzana, Frank P., Kansas City
Lawless, Charles L., Marshall
Lawrence, Fred E., Indianapolis, Ind.
(Member Boone County)
Lawrence, George H., St. Louis
Lawrence, John R., Marshall
Lawrence, John V., St. Louis
Lawton, John T., St. Louis
Lawton, Lawrence W., St. Louis
Lawton, Thomas P., St. Louis
Layton, Ira C., Kansas City
LeBlanc, Leo J., St. Louis
Lederer, Charles M., Warrensburg
Lederman, Joseph, St. Louis
Lee, A. E., Illmo
Lee, Chester E., Kansas City
Lee, George C., Kansas City
Lee, Leonard R., New York, N. Y.
(Member Grand River Society)
Leech, Charles A., Columbia
Leech, Maurice P., Fayette
Leeper, Claude K., Address Unknown
(Member Boone County)
Legner, Stanley G., Perryville
Lehner, Richard L., Kansas City
Leidinger, Karl J., Republic
Leifer, William W., Kansas City
Leitch, Cecil G., Kansas City
Leitz, Frank B., Kansas City
Lembeck, Joseph A., St. Louis
Lemmon, George B., Springfield
Lemmon, G. Bruce, Jr., Springfield
Lemoine, Albert N., Kansas City
Lenobel, Milton I., St. Louis
Lentz, Harold C., Neosho
Lentz, William R., Hickman Mills
Leonard, Ward H., Kansas City
Lerner, Abe F., Clayton
Lerwick, Everett R., St. Louis
Leslie, Charles H., Kirkwood
Leslie, James F., Springfield
Leslie, J. Paul, Jefferson City
Leslie, J. T., Jefferson City
Leslie, Walter L., Russellville
Levey, Harry B., Kansas City
Levey, Simon A., St. Louis
Levin, Marvin E., University City
Levin, Sidney S., St. Louis
Levine, Ervan L., Vandalia
(Member Marion-Ralls-Shelby County)
Levitt, Joseph, St. Louis
Levy, Irwin, St. Louis
Lewellen, Charles H., Louisiana
Lewellen, Charles P., Louisiana
Lewin, Wilbur H., St. Louis
Lewis, James E., Jr., St. Louis
Lewis, Ray B., Columbia
Lewis, Revis C., Kansas City
Lewis, William E., Kansas City
Leydig, Stanley M., St. Louis
Lichtor, Alexander, Kansas City
Lichtor, Joseph M., Kansas City
Lieb, Francis X., St. Louis
Lieb, Otto, St. Louis
Lieberman, B. Albert, Jr., Kansas City
Liersch, Joseph C., Kansas City
Liese, Grover B., St. Louis
Liggett, Hiram S., St. Louis
Lilly, Terry E., Kansas City
Lilly, Terry E., Jr., Kansas City
Limbaugh, W. R., Hayti
Lindeman, Carl H., St. Louis
Lindquist, Carl N., Kansas City
Lindsay, John W., Conway
Link, Vance E., Independence
Linton, C. S., Kennett
Linville, Howard E., Kansas City
Lipschitz, Ervin, Clayton
Lipsitz, Ellis S., St. Louis
Lischer, Carl E., St. Louis

Lissack, Edmund, Concordia
Liston, Odus, Oak Grove
  (Member Lafayette-Ray County)
Littauer, David, St. Louis
Littmann, Lewis E., Clayton
Litton, Lyle D., Springfield
Litzow, Louis T., St. Louis
Locker, George E., Iantha
Lockhart, Charles E., Springfield
Lockwood, Ira H., Kansas City
Lockwood, W. E., Slater
Loeb, Virgil, St. Louis
Loeb, Virgil, Jr., St. Louis
Loeffel, Ellen S., St. Louis
Loewy, Louise B., Kansas City
Logan, James A., Warsaw
Lohr, Curtis H., St. Louis
Londe, Sol, St. Louis
Lonergan, Warren M., St. Louis
Long, David S., Harrisonville
Long, Forrest C., Savannah
Long, Frank B., Sedalia
Long, Robert S., Kansas City
Longfield, Fred J., Lathrop
Lonsway, Maurice J., St. Louis
LoPiccolo, Vincent J., St. Louis
Lottes, James O., St. Louis
Loughead, John R., Poplar Bluff
Love, Drury M., Kansas City
Love, W. S., Nevada
Loving, B. Rush, Ballwin
Lovinggood, Thomas A., Cape Girardeau
Lowe, Alvin L., Sedalia
Lowe, Horace A., Springfield
Lowe, Horace A., Jr., Springfield
Lowell, Paul, Kansas City
Lowenstein, Paul S., Clayton
Lowney, John F., Columbia
Lowrey, Ford J., Kansas City
Loyd, Earl L., Jefferson City
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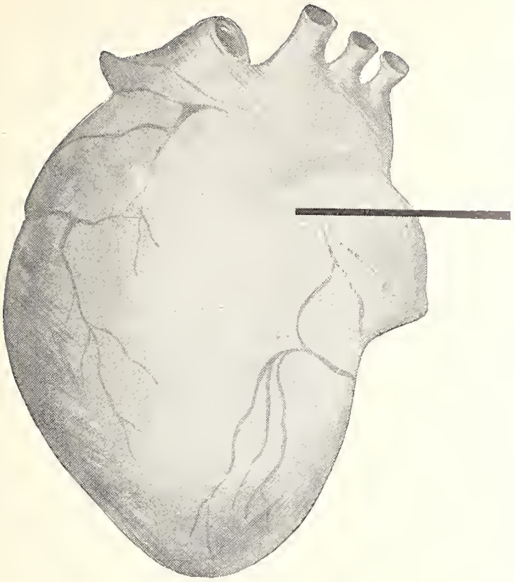

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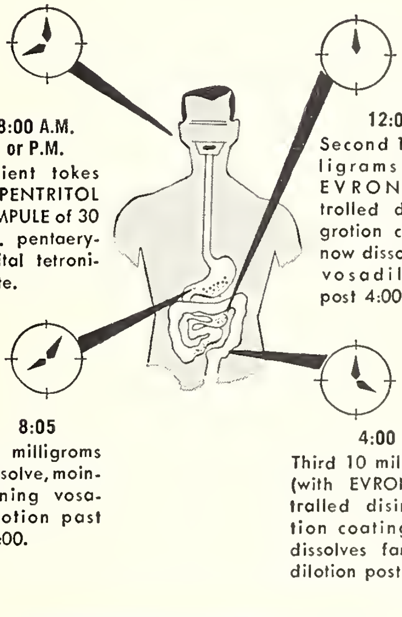

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2. Russek and Assoc., 153:3 J.A.M.A. (Sept. 19, 1953)
3. Winsor and Humphreys, Angiology 3:1 (Feb. 1952)

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(Member Clay County)
Porter, William J., Independence
Portuondo, Bonaventura C., St. Louis
Post, Cyril A., Poplar Bluff
Post, J. P., Washington
Post, Lawrence T., St. Louis
Post, M. Hayward, St. Louis
Post, Winfred L., Joplin
Potashnick, Robert, St. Louis
Pote, Thomas B., St. Louis
Potter, Allen B., St. Louis
Potter, Lee G., Kansas City
Potter, Thompson E., St. Joseph
Powell, Benson M., Salina, Kansas
(Member Jackson County)
Powell, Carl A., St. Louis
Powell, Earl A., St. Louis
Powell, Edwin M., Springfield
Powell, Rudolph V., St. Louis
Powers, John M., Kansas City
Powers, Pierce W., St. Louis
Pranger, Sylvester H., St. Louis
Prentiss, Harry S., Kansas City
Presnell, Cleitus A., St. Louis
Press, Maurice J., St. Louis
Preston, Albert, Jr., Kansas City
Price, Edward B., Jr., Washington, D. C.
(Member Jackson County)
Price, Robert P., Fulton
Printz, Joseph H., Kansas City
Printz, Otto J., Kansas City
Probstein, Jacob G., St. Louis
Proctor, Donald C., Sedalia
Proetz, Arthur W., St. Louis
Pruett, Burchard S., St. Louis
Pruett, Hubert S., St. Louis
Puckett, Cordelia, St. Louis
Pugh, Richard G., Independence
Pullen, Roscoe L., Columbia
Pulliam, Madison J., St. Louis
Purcell, Harry K., St. Louis
Putnam, John A., Carthage
Pyne, Herbert S., St. Louis
Pyrtle, James R., Centerville

Q

Quer, Erich A., Kansas City
Quinn, Abram T., St. Louis
Quintana, Manuel M., Perryville
Quisito, Joseph M., Trenton
Quistgard, Paul C., Kansas City

R

Rachlin, Maxwell, Brentwood
Rader, Ada Brainard, Martin City
Raemdonck, Alphonse J., St. Louis
Ragsdale, George M., Paris
Rainey, Robert, St. Louis
Rainwater, E. H., Springfield
Ramey, Ehret O., Kansas City
Ramos, John F., Jr., Kansas City
Ramos, Raoul L., Poplar Bluff
(Member St. Louis Medical Society)
Ramsey, Ora W., Madison College, Tenn.
(Member Ozarks Society)
Ramsey, R. H., St. Louis
Randall, Don Q., St. Charles
Randall, Leslie, Licking
Rannie, Paul R., Independence
Rapp, Harold B., Cape Girardeau
Rawlins, Fred E., Cape Girardeau
Rawlins, Kelly, Holden
Ray, Richard H., St. Louis
Ready, James H., Florissant
Redmond, William, St. Joseph
Reed, Edsel S., St. Joseph
Reed, Henry L., Licking
Reeder, Charles C., New Madrid
Reese, A. Victor, Webster Groves
Reeves, Gerald A., St. Charles
Reh, Edward P., St. Louis
Reich, Harry A., St. Louis
Reich, Oliver F., Kimmswick
Reichert, M. Cecelia, St. Louis
Reiches, Aaron J., St. Louis
Reichman, John J., Hannibal
Reid, Charles T., Joplin
Reid, James A., Marshall
Reid, William F., Richmond, Va.
(Member St. Louis Medical Society)
Reilly, Leo J., St. Louis
Reilly, Pierce J., St. Louis
Reineck, John A., St. Louis
Reinhard, Edward H., St. Louis
Reinhardt, George R., Kansas City
Reis, Carl J., St. Louis
Reister, Dorothy D., Jefferson Barracks
Reister, Philip D., St. Louis
Reitz, Carl H., Kansas City
Remley, George C., Kansas City
Rendleman, George F., St. Louis
Repetto, Albert M., St. Louis
Repp, Theodore J., St. Louis
Reser, Thomas S., Cole Camp
Resnikoff, Lewis E., Address Unknown
(Member St. Louis Medical Society)
Reuter, Louis A., St. Louis
Reynolds, Clarence C., Columbia
Reynolds, Fred, St. Louis
Reynolds, Garland A., Cape Girardeau
Reynolds, James R., Neosho
Rhoades, Arthur B., Kansas City, Kansas
(Member Jackson County)
Rhodes, Euhlan L., Sedalia
Rice, Carl E., Hillsboro
Rice, Earl R., St. Louis
Rice, Grover C., Brunswick
Richardson, Marion W., Kansas City
Richardson, R. G., Jefferson City
Richardson, William R., Union
Richman, Elmer, St. Louis
Richter, William B., Stockton
Ricketson, George M., Hayti
Riddell, Richard V., St. Joseph
Ridings, Harold D., Cape Girardeau
Ries, Douglas A., Richmond Heights
Rifkin, Shale M., St. Louis
Riggio, Salvatore N., Edwards, Calif.
(Member St. Louis Medical Society)
Rigney, Levi M., Springfield
Riley, Fred P., Perryville
Riley, John J., St. Louis
Riley, Philip A., Jr., Washington, D. C.
(Member St. Louis Medical Society)
Riley, Ralph D., St. Louis
Riley, Ralph W., Lexington
Riley, William H., St. Louis
Riller, Lowell E., Kansas City
Ringo, Henry J., St. Louis
Rinkel, Herbert J., Kansas City
Riordan, Lawrence M., St. Louis
Ritchie, Frances R., St. Louis
Ritter, Hubert A., St. Louis
Ritter, Raymond A., Cape Girardeau
Robbins, Martin V., Peculiar
Roberson, John H., Lilbourn
Robert, Harold K., Clayton
Roberts, Billy J., Richland
Roberts, Harold M., Kansas City
Roberts, John P., Kirkwood
Roberts, John R., Brentwood
Roberts, Lacy M., Kansas City
Roberts, Paul A., Sweet Springs
Roberts, Sam E., Kansas City
Robertson, Frank G., St. Louis
Robertson, J. Archie, Kansas City
Robertson, LeRoy L., St. Louis
Robichaux, Eugene B., Excelsior Springs
Robichaux, Eugene C., Excelsior Springs
Robins, Eli, St. Louis
Robinson, Arthur W., Kansas City
Robinson, Don, Address Unknown
(Member Saline County)
Robinson, Donald E., Kansas City
Robinson, Edith C., St. Louis
Robinson, Edward E., Adrian
Robinson, Ernest Kip, Kansas City
Robinson, George G., Humansville
Robinson, G. Wilse, Kansas City
Robinson, G. Wilse, Jr., Kansas City
Robinson, John A., Edgerton
Robinson, William J., Kansas City
Robison, James T., Jr., Kansas City
Roblee, Melvin A., St. Louis
Roche, Maurice B., St. Louis
Rodeman, John M., Sedalia
Rodes, Ned D., Columbia
(Member Audrain County)
Rodgers, Dorothy L., Columbia
Rodgers, Elrie P., Columbia
Rodgers, Samuel U., Kansas City
Roe, Allen N., Address Unknown
(Member St. Louis Medical Society)
Roebber, Harry M., Bonne Terre
Roehrs, Marvin E., Marshall
Roesler, Paul J., Colorado Springs, Colo.
(Member Mineral Area)
Rogers, C. H., St. Louis
Rogers, John A., University City
Rohlfing, Edwin H., St. Louis
Rohlfing, Walter H., St. Louis
Rolens, Louis E., Granby
Roller, Merrill J., Hannibal
Rollins, H. D., Winona
Rolufs, Lloyd S., Kirkwood
Rolwing, E. Charles, Charleston
Romendick, Samuel S., Fort Bliss, Texas
(Member St. Louis Medical Society)
Ronald, Douglas C., Butler
Roper, Stanley D., Ozark
Rose, Charles W., Kansas City
Rose, Dalton K., St. Louis
Rose, Frank H., Albany
Rosecan, Marvin, St. Louis
Rosen, Charles S., St. Louis
Rosen, Max, Springfield
Rosenbaum, Harry D., St. Louis
Rosenbaum, Herbert E., St. Louis
Rosenberg, Henry E., St. Louis
Rosenberg, Meyer B., Address Unknown
(Member St. Louis Medical Society)
Rosenfeld, Henry, St. Louis
Rosenthal, Frances E., Joplin
Rosenthal, Irwin I., St. Joseph

Rosenthal, Louis M., Greentop
Ross, Charles M., Coronado, Calif.
(Member St. Louis Medical Society)
Ross, Herman C., Brentwood
Ross, Pren J., Grant City
Rost, William B., St. Joseph
Roth, John J., St. Louis
Rother, Paul H., St. Charles
Rothman, David, St. Louis
Rothweiler, Robert J., St. Louis
Rotter, Julius C., St. Louis
Roufa, Joseph F., St. Louis
Roulhac, George E., St. Louis
Roundy, Collis I., St. Joseph
Rouse, David M., Mexico
Rouse, Ernest T., St. Louis
Rowlette, Avery P., Moberly
Roy, Joseph A., St. Louis
Royce, Robert K., St. Louis
Royse, Roy P., Sullivan
Royston, Grandison D., Hope, Arkansas
(Member St. Louis Medical Society)
Rubin, Sidney, Kansas City
Rubnitz, Leon H., Kansas City
Ruddell, George W., St. Louis
Rudi, Herbert J., St. Louis
Rufe, Jack R., Kansas City
Rugh, Walter B., St. Charles
Ruhling, Rudy, St. Louis
Rumer, Donald G., St. Louis
Rund, Emmet H., St. Louis
Rush, Joseph C., St. Louis
Rusk, Earl McD., New Bloomfield
Russell, Barbara E., Rolla
Russell, Earl D., Springfield
Russell, James M., Monett
Russell, Robert K., Raytown
Rutledge, John F., Crystal City
Rutledge, Paul E., Kirkwood
Rutledge, William J., Campbell
Ryan, John B., Hermann
Ryan, John H., St. Joseph
Ryan, John J., Clayton
Ryan, Linus M., St. Louis
Ryan, Robert E., St. Louis
Ryland, Caius T., Lexington

S

Sachar, Leo A., St. Louis
Sachs, Ernest, New Haven, Conn.
(Member St. Louis Medical Society)
Saferstein, A. Lester, Kansas City
Saferstein, T. Harry, St. Joseph
St. John, Dewey, St. Louis
St. John, Thomas C., St. Louis
Saladino, Anthony, Kansas City
Sale, Llewellyn, St. Louis
Sale, Llewellyn, Jr., St. Louis
Salisbury, William J., St. Louis
Sammons, Harry C., St. Louis
Sample, George A., Chaffee
Samuelson, Edward A., Kansas City
Sanders, George E., Excelsior Springs
Sanders, Harmon U., Jr., Independence
Sanders, Robert D., St. Louis
Sanders, Theodore E., St. Louis
Sanders, William F., Kansas City
Sandy, Charles, Prairie Village, Kansas
(Member Cooper County)
Sante, L. R., St. Louis
Saper, Philip, Lee's Summit
Sargent, Alden P., Sikeston
Sargent, Frederich K., St. Louis
Sarno, S. M., Morehouse
Saslow, George, St. Louis
Sassin, Edmond F., St. Louis
Sato, George, St. Louis
Satterfield, Val B., St. Louis
Sauer, F. J. Dean, Clayton
Sauer, Gordon C., Kansas City
Sauer, William E., St. Louis
Sauer, W. Nicholas, St. Louis
Saunders, Everett L., Independence
Sausville, Albert J., St. Louis
Sawyers, Gordon E., Kansas City
Saxton, John A., Jr., St. Louis
Saylor, Robert K., Joplin
Scarpellino, Louis, Kansas City
Schaerrer, Hans, Kansas City
Schaerrer, William C., Kansas City
Schaffer, Richard C., Kansas City
Schaper, Ernest H., St. Louis
Schattyn, Martyn, St. Louis
Schauffler, Robert M., Kansas City
Schechter, Samuel E., St. Louis
Scheele, Paul M., University City
Scheer, George E., St. Louis
Scheff, Harold, St. Louis
Scherman, Victor E., St. Louis
Schertz, Truman B., St. Joseph
Scheuber, Charles, San Antonio, Texas
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Schewe, Elmer J., Jr., Clayton
Schiele, Herbert S., Jr., Oakland, Calif.
(Member St. Louis Medical Society)
Schierman, William D., St. Louis
Schiffmacher, Jack E., Kansas City
Schlenker, Lawrence, St. Louis
Schlossstein, Adolph G., St. Louis
Schluer, Elmer P., St. Louis
Schlueter, Newell W., St. Louis
Schmidt, Charles A., Washington
Schmidt, Edmund M., St. Louis
Schmidt, Edwin H., St. Louis
Schmidt, Herbert H., Washington
Schmiemeier, Herman A., St. Louis
Schmiemeier, Roy H., Affton
Schmitz, Edgar F., St. Louis
Schneider, Sam, St. Louis
Schneider, Vincent A., St. Charles
Schnoebelen, Paul C., St. Louis
Schoeberl, C. B., Joplin
Schooley, Renick C., Odessa
Schopp, Alvin C., St. Louis
Schorer, Edwin H., Kansas City
Schottman, Gerhard W., Jr., Kansas City
Schrepel, Herbert O., St. Louis
Schroeder, Henry A., St. Louis
Schroeder, Sidney O., Liberty
Schuchat, W. Louis, St. Louis
Schuck, Philip, St. Louis
Schulte, G. A., Joplin
Schultz, Loraine E., Kansas City, Kansas
(Member Jackson County)
Schultz, Samual, St. Louis
Schuman, Stanley H., St. Louis
Schuster, Joseph N., Jr., St. Louis
Schutz, Carl B., Kansas City
Schutz, Richard B., Kansas City
Schwartz, Alfred J. C., Chicago, Ill.
(Member Franklin-Gasconade-Warren County)
Schwartz, Eugene J., Springfield
Schwartz, Frederick O., St. Louis
Schwartz, Henry G., St. Louis
Schwartz, Melvin M., St. Louis
Schwartzman, Bernard, St. Louis
Schwarz, Henry II, Columbia
Schweiss, John F., Tenafly, N. J.
(Member St. Louis Medical Society)
Schweitzer, Fred C., Jr., Springfield
Sciortino, Gaspare, St. Louis
Sciortino, John S., St. Louis
Scopelite, Joseph A., St. Louis
Scorse, Sidney W., Joplin
Scott, Clive D., Louisiana
Scott, Elijah A., St. James
Scott, Elwin P., St. Louis
Scott, Henry F., Ballwin
Scott, J. U., Address Unknown
(Member West Central Medical Society)
Scott, Wendell G., St. Louis
Seabaugh, D. Rusby, Cape Girardeau
Seabaugh, Dayton I. L., Jackson
Seabaugh, L. R., Cape Girardeau
Seabaugh, Oda L., Cape Girardeau
Seabaugh, Ottis D., Webster Groves
Seabaugh, William O. L., Cape Girardeau
Seabold, John A., St. Louis
Seaman, William B., St. Louis
Seddon, John W., St. Louis
See, William B., Columbia
Seely, Clark W., Kansas City
Seib, George A., St. Louis
Selle, Harold C., St. Louis
Sellers, Charles J., Mt. Moriah
Senn, Emmett J., Herculaneum
Senne, Herbert C., St. Joseph
Sennott, John S., Jefferson City
Senor, Samuel D., St. Joseph
Senor, Samuel E., St. Joseph
Senturia, Ben H., St. Louis
Senturia, Hyman R., St. Louis
Serkes, Kenneth D., St. Louis
Sertl, John D., St. Louis
Settle, Emmett B., Rockport
Sevin, Omar R., St. Louis
Sewell, Minor F., Kansas City
Sewell, W. S., Springfield
Sewing, Arthur H., St. Louis
Sexauer, Arthur E., Ste. Genevieve
Sexton, Daniel L., St. Louis
Sexton, Elmer E., St. Louis
Shackelford, Horace H., St. Louis
Shade, Virgil E., St. Louis
Shahan, Philip T., St. Louis
Shahan, William E., St. Louis
Shaner, John F., St. Louis
Shapiro, Lazare M., Kansas City
Shapleigh, John B., St. Louis
Sharp, Austin R., St. Louis
Sharp, William L., Address Unknown
(Member Saline County)
Shatz, Burton A., St. Louis
Shaver, Nellie A., St. Louis
Shaw, Carvel T., El Paso, Texas
(Member Franklin-Gasconade-Warren County)
Shaw, William J., Fayette
Shaw, William J., Jr., Fayette
Sheets, John S., St. Louis
Sheets, Martin E., St. Louis
Shelby, Mitchell H., Cape Girardeau
Shelden, Russell D., Kansas City
Sheldon, John, Kansas City
Shelton, Edward O., Eldon
Shepherd, Charles T., St. Louis
Sherard, Julius C., St. Louis
Sheridan, Edmund R., St. Louis
Sherman, Alfred I., St. Louis
Sherman, Paul H., Kansas City
Sherry, Sol, St. Louis
Sherwin, Charles S., St. Louis
Shevlin, Charles F., St. Joseph
Shifrin, Alexander, Kansas City
Shireman, Kenneth L., Kansas City
Shirey, Arnold G., Hayti
Shobe, Frank O., St. Louis
Shofstall, Charles K., Kansas City
Shofstall, William H., Kansas City
Shook, Lester D., Kansas City
Shoss, Milton, Cape Girardeau
Shrader, E. Lee, St. Louis
Shreffler, Algie R., Tavernier, Fla.
(Member St. Louis Medical Society)
Shrout, Cecil B., Bunceton
(Member West Central Society)
Shuey, Herbert H., Kansas City
Shuford, Wade H., Conover, N. C.
(Member St. Louis County)
Shull, George D., Jefferson City
Shumate, D. L., Kansas City
Shumate, L. St. Clair, Reeds Spring
Shutt, Cleveland H., St. Louis
Shypper, Moses J., Kansas City
Siceluff, Joseph G., Springfield
Siddall, H. Stewart, Cincinnati, Ohio
(Member St. Louis Medical Society)
Siebert, Walter J., St. Louis
Siegel, Carl D., Sedalia
Siegel, Peter V., Smithton
Siemers, George E., St. Louis
Siesener, Herbert H., St. Louis
Sievers, Edward F., St. Louis
Signorelli, Andrew J., St. Louis
Silsby, Don H., Springfield
Silsby, Don James, Springfield
Silsby, Harry D., Springfield
Silverberg, Charles, St. Louis
Silvermintz, Saul D., Richmond Heights
Simmons, B. B., St. Joseph
Simmons, Leroy, Sarcoxie
Simmons, Sterling P., Marshall
Simon, David L., San Francisco, Calif.
(Member St. Louis Medical Society)
Simon, Jerome I., St. Louis
Simon, Sanford, Kansas City
Simon, Selig, St. Louis
Simpson, Eber, St. Louis
Simpson, Emerson L., Springfield
Simpson, Guy L., St. Louis
Simpson, Lloyd, Columbia
Simpson, Morris B., Kansas City
Simril, Wayne A., Clayton
Sims, John L., Joplin
Sinclair, Alexander B., Kansas City
Singleton, J. Milton, Kansas City
Siniscal, A. A., Rolla
Sinkler, William H., St. Louis
Sinner, Bernard L., St. Louis
Sipes, Frank M., Little Rock, Ark.
(Member West Central County)
Sisk, James C., Clayton
Sisson, Richard G., St. Louis
Skeffington, Mary Jane, St. Louis
Skilling, David M., Jr., St. Louis
Skillman, Robert K., Kansas City
Skinner, John O., Kansas City
Skinner, John S., St. Louis
Skinner, John T., Kansas City
Skoog, Andrew L., Kansas City
Slaughter, Shelby C., Fredericktown
Slentz, Edwin L., Kansas City
Slentz, William A., Kansas City
Slickman, R. A., Appleton City
Slusher, Ernest W., Kansas City
Small, Walter L., Kansas City
Smiley, William, St. Louis
Smit, Herbert M., St. Louis
Smith, Andrew J., St. Joseph
Smith, Arthur B., Kansas City
Smith, Audra B., Sikeston
Smith, Benjamin F., Jr., West Point, N. Y.
(Member St. Louis Medical Society)
Smith, C. Souter, Springfield
Smith, Carl C., Moberly
Smith, Clifton, St. Joseph
Smith, David E., University City
Smith, Frank J., St. Louis
Smith, Garland F., St. Louis
Smith, Gladys C., Oklahoma City, Okla.
(Member Boone County)

Smith, Herbert P., St. Louis
Smith, Hubert E., Kansas City
Smith, Hugh R., St. Louis
Smith, Ira T., Kansas City
Smith, J. Earl, St. Louis
Smith, James O., Clinton
Smith, John R., St. Louis
Smith, Kathleen, St. Louis
Smith, Louis J., New Madrid
Smith, Milton, St. Louis
Smith, Robert M., St. Louis
Smith, Robert S., New York, N. Y.
(Member St. Louis Medical Society)
Smith, Robert W., Marceline
Smith, Roland T., Joplin
Smith, Rollin H., West Plains
Smith, Sidney E., St. Louis
Smith, Stephen D., Columbia
Smith, Ulysses S., Hannibal
Smith, William A., Somerton, Ariz.
(Member St. Louis County)
Smith, William J., Hannibal
Smith, William R., Carthage
Smolik, Edmund A., St. Louis
Smull, Ned W., Kansas City
Snavely, Edmund C., Sedalia
Snead, William H., Springfield
Sneid, Philip, Kansas City
Snider, Samuel H., Kansas City
Snyder, Edward N., St. Louis
Sodeman, William A., Columbia
Soderberg, N. B., Address Unknown
(Member Jackson County)
Sommer, Conrad S., St. Louis
Sophian, Abraham, Kansas City
Soule, Samuel D., St. Louis
Spafford, Allen L., Kansas City
Spalding, Wilber B., Plattsburg
Spears, Charles A., Pierce City
Speidel, F. W., Senath
Spelman, A. E., Smithville
Spence, Elbert L., Kennett
Spencer, Floyd H., St. Joseph
Spencer, Selden, St. Louis
Spinzig, Edgar W., Kirkwood
Spitz, Milton A., Chicago, Ill.
(Member St. Louis County)
Spitze, Edward C., Columbus, Ohio
(Member St. Louis County)
Spitzer, Ernest, University City
Spivy, Raymond M., St. Louis
Spoeneman, Marlin C., St. Louis
Spoenemann, Walter H., St. Louis
Sprong, Aaron A., Excelsior Springs
Stacey, Wallace R., Independence
Stacy, Winton T., Fort Sill, Okla.
(Member Buchanan County)
Staehle, Melvin E., St. Louis
Staggs, William A., Kansas City
Stahl, Phineas D., St. Louis
Staley, Harry R., Kansas City
Stamey, James T., St. Joseph
Standley, Eugene T., Columbia
Stanley, Charles G., Kansas City
Stansbrough, Raymond A., St. Louis
Stanton, Mearl F., Army Chemical Center, Md.
(Member St. Louis Medical Society)
Stanze, Frank J., St. Louis
Staples, Daniel E., Butte, Mont.
(Member St. Louis Medical Society)
Starkloff, Gene B., St. Louis
Starkloff, Max, St. Louis
Starr, Phillip H., St. Louis
Statland, Harry, Kansas City
Statland, Morris, Kansas City
Staton, R. Hamilton, Carrollton
Stauffacher, C. Gordon, Sedalia
Stauffer, Harry B., Jefferson City
Stecker, George, St. Louis
Steele, Jack T., San Francisco, Calif.
(Member St. Louis Medical Society)
Steffen, Lawrence F., Kansas City
Stegman, Elmer G., Raytown
Stein, Arthur W., St. Louis
Stein, Harry J., St. Louis
Stein, Leonard A., St. Louis
Steinbeck, Herbert D., Union
Steinberg, Franz U., St. Louis
Steiner, Albert S., St. Louis
Steiner, Alexander J., St. Louis
Steinkamp, Ruth C., Clayton
Stelmach, Walter J., Kansas City
Stephan, August P., Jefferson City
Stephens, LeRoy J., St. Louis
Stephens, Louis F., St. Louis
Stephens, William A., St. Louis
Stephenson, Hugh E., Jr., Columbia
Sterling, C. E., St. Louis
Sterling, John A., Maplewood
Stevens, Robert W., St. Louis
Stewart, Floyd, St. Louis
Stewart, Frances H., St. Louis
Stewart, Gordon T., Mt. Ida, Ark.
(Member South Central Society)
Stewart, J. W., St. Louis
Stewart, R. Wendell, Springfield
Stewart, Robert H., Kansas City
Stewart, William J., Columbia
Stickle, A. W., St. Louis
Stickler, Ralph O., Kirksville
Stindel, Charles E., Webster Groves
Stine, Dan G., Camdenton
(Member Boone County)
Stines, Thomas I., Jr., Address Unknown
(Member St. Louis Medical Society)
Stock, Albert E., Colorado Springs, Colo.
(Member St. Louis Medical Society)
Stocking, Lyman C., Kirkwood
Stockton, Raymond W., Kansas City
Stockwell, A. Lloyd, Kansas City
Stoelzle, Joseph D., Kirkwood
Stokes, Julius B., Excelsior Springs
(Member Ozarks Medical Society)
Stolar, Jacob, St. Louis
Stone, Charles A., St. Louis
Stone, Edna M., St. Louis
Stone, William E., Boonville
Stormont, Riley M., Webb City
Stratemeier, Edward H., Kansas City
Strauchen, Gilbert W., Webster Groves
Strauss, Arthur E., St. Louis
Streeter, Ralph T., Clayton
Streetor, Roderick D., Address Unknown
(Member Chariton-Macon-Monroe-Randolph Society)
Strehlman, Benjamin G., Union
Stricker, Emil A., St. James
Stricker, Harold C., Jefferson City
Strong, Richard M., Hannibal
Stryker, Garold V., St. Louis
Stuart, Byron M., Boonville
Stuart, Daniel D., Brunswick
Stude, William C., St. Louis
Stuebner, Roland W., Clayton
Stutsman, Albert C., St. Louis
Styblo, Clarence J., Cleveland, Ohio
(Member St. Louis Medical Society)
Sudholt, Alfred F., Jr., St. Louis
Sugarbaker, Everett D., Jefferson City
Suggett, Finis C., Columbia
Sullivan, B. Hazard, Miami
Sullivan, Clement J., St. Louis
Sullivan, James F., St. Louis
Sullivan, William J., Providence, R. I.
(Member North Central County)
Sultzman, Francis E., Hannibal
Summers, Caldwell B., Kansas City
Summers, Jacob H., Lebanon
Summers, John B., St. Louis
Summers, Joseph S., Jefferson City
Summers, Joseph S., Jr., Jefferson City
Summers, Thomas F., Berkeley
Sunderman, Raymond C., St. Louis
Sundstrom, Frank D., Springfield
Susanka, William D., Affton
Sutherland, Gladys, Centralia
Sutherland, John C., Nampa, Idaho
(Member St. Louis Medical Society)
Sutphin, John B., Ferguson
Sutter, Richard A., St. Louis
Sutton, Charles E., Cape Girardeau
Swarm, Richard L., Bethesda, Md.
(Member St. Louis Medical Society)
Swartz, George K., St. Louis
Sweaney, Isaac F., Oregon
Sweet, Herbert C., Webster Groves
Sweets, Henry H., Jr., Columbia
Sweiger, James H., New York, N. Y.
(Member Grand River Society)
Swekosky, Frank J., St. Louis
Swisher, Robert C., Kansas City
Switzer, Clyde, Grandview
Szmanski, Stanley R., Moberly

T

Tabris, Julius A., Kansas City
Tadlock, Baxter W., St. Joseph
Tahir, Mohammad, Auburn, Ala.
(Member Buchanan County)
Talbott, Hudson, St. Louis
Tamblyn, Claire L., Kansas City
Tanaka, George M., St. Louis
Tanner, Robert H., Jefferson City
Tapper, Stephen M., St. Louis
Tarrasch, E. L., Springfield
Tarson, Solomon S., Kansas City
Tarver, Quinton, Kennett
Tarvydas, Francis, Edina
(Member Moniteau County)
Tashma, Sigmund, St. Louis
Tasker, Charles B., Kansas City
Tate, Lloyd L., St. Louis
Taussig, Barrett L., St. Louis
Taylor, Duane R., Portland, Oregon
(Member St. Louis County)
Taylor, Edward L., Steele
Taylor, Herbert I., Jefferson City
Taylor, Leo T., Neosho
Taylor, Leon A., Jefferson City
Taylor, Van Wm., Bonne Terre
Taylor, William E., Springfield
Teall, Raymond E., Kansas City
Teiber, Frederick W., St. Louis
Teneglia, Eutimio D., St. Louis
Tess, Melvin J. H., St. Louis
Tesson, James A., Kansas City
Thale, Thomas, St. Louis
Theel, Otto W., Jr., Kansas City
Thiele, Belmont R., St. Louis
Thiele, George H., Kansas City
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Tadlock, Baxter W., 703 S. 13th St.
Tahir, Mohammad, Infirmary A.P.I., Auburn, Ala.
Thomas, Forrest, State Hospital No. 2
Thompson, F. G., Jr., P. O. Box 747
Timerman, Arthur R., 234 Illinois Ave.
Wachter, Harry E., 212 Kirkpatrick Bldg.
Wadlow, Ernest E., Kirkpatrick Bldg.
Waggoner, Sharon E., 301 Illinois Ave.
Warres, Herbert L., 902 Edmond St.
Weed, Randal W., 824 Edmond St.
Whitsell, John C., 824 Edmond St.
Whitsell, Ora E., 824 Edmond St.
Willumsen, Henry C., P. O. Box 747

BUTLER-RIPLEY-WAYNE COUNTY MEDICAL SOCIETY

Barbour, Marvin R., Poplar Bluff
Baskett, Edgar D., Poplar Bluff
Biggs, Fred J., Jr., Poplar Bluff
Brandon, Walter L., Poplar Bluff
Brookreson, Alton F., Poplar Bluff
Canlas, Emilio M., Poplar Bluff
Clay, Hampson S., Poplar Bluff
Cline, Edward W., Poplar Bluff
Cline, Harold H., Piedmont
Dinelli, Frank E., Poplar Bluff

Engelhardt, Robert C., Poplar Bluff
Gernstetter, Sangwill L., Poplar Bluff
Harwell, J. Lester, Poplar Bluff
Harwell, James Lee, Poplar Bluff
Henrickson, H. O., Poplar Bluff
Henrickson, Hardin M., Poplar Bluff
Henrickson, William E., Poplar Bluff
Johnson, Frank C., Doniphan
Kneibert, Fred L., Poplar Bluff
Loughead, John R., Poplar Bluff
McPheeters, James W., Poplar Bluff
McPheeters, J. W., Jr., Poplar Bluff
Macauley, Bernard J., Poplar Bluff
Malinoski, Mitchell V., Poplar Bluff
Markel, Arthur D., Poplar Bluff
Page, Jesse W., Foster A.F.B., Victoria, Texas
Parker, A. C., Jr., Poplar Bluff
Post, Cyril A., Poplar Bluff
White, Homer E., Naylor
Willis, Norman E., Poplar Bluff

CALDWELL COUNTY

(Grand River Medical Society)

CALLAWAY COUNTY MEDICAL SOCIETY

Brown, John J., Fulton
Brown, Katherine S., Fulton
Cremer, William J., Fulton
Crews, Robert N., Fulton
Durst, Henry, Fulton
Fowler, J. Henry, Fulton
Gish, Rutledge, Fulton
Hall, Robert G., Nevada
Hanks, Ralf, Fulton
Hunter, James R., Fulton
Lanier, Andrew S., Fulton
Lanier, Patricia F., Fulton
McCubbin, J. Burleigh, Fulton
Nichols, Frank J., Fulton
Price, Robert P., Fulton
Rusk, Earl McD., New Bloomfield
Williamson, William H., Mokane
Wood, George F., Fulton

CAMDEN COUNTY MEDICAL SOCIETY

Claiborn, Edward G., Camdenton

CAPE GIRARDEAU COUNTY MEDICAL SOCIETY

(Cape Girardeau)

Ashley, Hugh, Jr., 711a Broadway
Ashley, Hugh V., 711 Broadway
Barnes, Seth S., 1854 Broadway
Blaylock, Richard D., Oak Ridge
Campbell, Edward D., 937 Broadway
Cochran, Jo R., 709a Broadway
Cook, Norman L., St. Francis Hospital
Crites, Edward, Sedgewickville
Crowe, John T., 937 Broadway
Davault, Webster W., Delta
Drace, James J., P. O. Box 154
Elrod, Dennis B., 1912 Broadway
Estes, Albert M., 714 Broadway
Ford, Walter W., Gordonville
Fuerth, Arthur L., R. R. No. 1
Hall, Frank W., 826 Themis St.
Herbert, Charles T., 824 Good Hope St.
Jaeger, Joseph N., Jackson
Juden, Alexander G., 714 Good Hope St.
Keim, John H., 801a Broadway
Kinder, James A., 826 Themis
Kratz, Paul E., 1912 Broadway
Lovinggood, Thomas A., St. Francis Hospital
McDonald, Eugene F., Jackson
Nussbaum, Paul B., 1758 Broadway
Oehler, William F., 234 N. Middle St.
Otto, Thomas G., 1912 Broadway
Rapp, Harold B., 1011 N. Henderson Ave.
Rawlins, Fred E., 1404 Perryville Ave.
Reynolds, Garland A., 826 Themis St.
Ridings, Harold D., 1858 Broadway
Ritter, Raymond A., St. Johns Hospital
Seabaugh, D. Rusby, 219 N. Pacific Ave.
Seabaugh, Dayton I. L., Jackson
Seabaugh, L. R., 219 N. Pacific Ave.
Seabaugh, Oda L., 720 South Blvd.
Seabaugh, William O. L., 24 N. Sprigg
Shelby, Mitchell H., 726 Themis St.
Shoss, Milton, 937 Broadway
Sutton, Charles E., 6 S. Fountain
Trolinger, J. H., Jackson
Tygett, Glenn J., 215 N. Sprigg St.
Wilson, Charles F., 714 Broadway
Wolff, Paul G., 1819 Broadway
Zimmermann, Carl A. W., Oakenwold R.F.D. Box 18.

CARROLL COUNTY

(Grand River Medical Society)

CARTER-SHANNON COUNTY MEDICAL SOCIETY

Davis, Robert I., Birch Tree
Rollins, H. D., Winona

CASS COUNTY

(West Central Missouri Medical Society)

CEDAR COUNTY

(West Central Missouri Medical Society)

CHARITON-MACON-MONROE-RANDOLPH COUNTY MEDICAL SOCIETY

Anderson, Dwight W., Moberly
Baker, Josephine D., Moberly
Barnett, Floyd A., Paris
Buck, Ulysses G., Rothville
Campbell, James E., Macon
Chute, W. Deward, Moberly
Cohrs, Clarence C., Moberly
Dreyer, Philip V., Huntsville
Eggleston, Donald E., Macon
Erni, Harry E., Macon
Fellows, William W., 4200 Cathedral Ave., N.W., Washington, D. C.
Fleming, Jacob W., Jr., Moberly
Fleming, Thomas S., Moberly
Hardy, John W., Sumner
Harms, Florian L., Salisbury
Hasson, Robert, Moberly
Hawkins, George W., Salisbury
Huber, Lasley E., Moberly
Johnson, Edward M., Macon
Miller, D. Herbert, Veterans Hospital, Muskogee, Okla.
Miller, Howard S., Macon
Petty, Wallace S., Macon
Ragsdale, George M., Paris
Rice, Grover C., Brunswick
Rowlette, A. P., Moberly
Smith, Carl C., Moberly
Streetor, Roderick D., Address Unknown
Stuart, Daniel D., Brunswick
Szymanski, Stanley R., Moberly
Weger, Carl C., Keytesville
West, William D., Address Unknown
Young, Robert H., Moberly

CHRISTIAN COUNTY

(Ozarks Medical Society)

CLARK COUNTY

(Lewis-Clark-Scotland County Medical Society)

CLAY COUNTY MEDICAL SOCIETY

Baird, J. Edward, Excelsior Springs
Bates, George C., North Kansas City
Casady, Gilbert N., Smithville
Chastain, Maurice W., North Kansas City
Dunham, R. H., North Kansas City
Dwyer, Reinhardt D., North Kansas City
Edwards, Theodore F., North Kansas City
Fischer, Edward H., North Kansas City
Fowler, I. Charles, North Kansas City
Gay, Elmer E., Richmond
Goodson, William H., Liberty
Hardegree, Harvey, Nichols Vet. Adm. Hospital, Louisville, Ky.
Hendren, Glenn W., Liberty
Hobbs, Earl B., Smithville
Hodge, Robert H., North Kansas City
Horton, Ray B., North Kansas City
Houck, Russell M., V. A. Hospital, Richmond, Va.
Knox, Earl R., 224 Rialto Bldg., Kansas City
Kuenzi, Donald E., Gashland
Langhus, Melvin O., North Kansas City
McCormick, James E., North Kansas City
McCracken, Samuel R., Excelsior Springs
Mullins, Bernard L., North Kansas City
Musgrave, David E., Excelsior Springs
Nicholson, Ralph L., Excelsior Springs
Parker, Robert H., North Kansas City
Pate, O. S., North Kansas City
Porter, Russell C., 831 N. Camino Miramonte, Tucson, Ariz.
Robichaux, Eugene B., Excelsior Springs
Robichaux, Eugene C., Excelsior Springs
Sanders, George E., Excelsior Springs
Schroeder, Sidney O., Liberty
Spelman, Archibald E., Smithville
Sprong, Aaron A., Excelsior Springs
Tripodi, Donald W., Excelsior Springs
Washburn, Walter L., North Kansas City
Waterman, F. M., Liberty
Werner, Dean F., North Kansas City
Willoughby, James W.. Address Unknown
Withrow, John B., North Kansas City
Zick, Walter J., 6159 McPherson, St. Louis

CLINTON COUNTY MEDICAL SOCIETY

Kimes, Ira D., Cameron
Longfield, Fred J., Lathrop
Luckenbill, Paul T., Plattsburg
Mabrey, John P., Plattsburg
Netherton, George F., Cameron
Spalding, Wilber B., Plattsburg
Wilbur, Ronald E., Cameron

COLE COUNTY MEDICAL SOCIETY

(Jefferson City)

Amos, James R., 2002 Meadow Lane
Belden, Edgar A., State Office Bldg.
Bohrer, E. Royse, 322 Jefferson St.
Bruce, James G., 234 Madison
Clark, Kendall A., 420 East High St.
Cox, William A., 125 E. High
Dorris, Richard P., Trust Bldg.
Enlow, Lawrence D., Trust Bldg.
Exon, C. Stuart, 503 East High St.
Garner, Lynn M., State Division of Health
Guhleman, Henry V., Jr., 506 East High St.
Gurnee, Landon H., 416 E. High St.
Kanagowa, H., Dallmeyer Bldg.
Kelly, Marshall W., 507 East High St.
Klebba, Larry B., P. O. Box 403
Leslie, J. Paul, Central Trust Bldg.
Leslie, J. T., 933 Fairmount
Leslie, Walter L., Russellville
Loyd, Earl L., 425 Madison St.
McHaney, John W., 606 E. High St.
McKnelly, William von, 1111 Moreau Drive
Mansur, Edward E., 2012 N. W. 13th St., Miami, Fla.
Matthews, John I., 425 Madison St.
Maxey, Hugh W., 626a Jefferson
Meier, F. X., 507 East High St.
Meinershagen, Charles W., 138 Forest Place
Ossman, Julian A., 2030 W. Main St.
Richardson, R. G., 421 Lafayette
Sennott, John S., 507 East High St.
Shull, George D., 521 East High St.
Stauffer, Harry B., Central Trust Bldg.
Stephan, August P., 98 W. Circle Drive
Stricker, Harold C., 21 Hobbs Terrace
Sugarbaker, Everett D., 2313 W. Main, Orchard Acres
Summers, Joseph S., Trust Bldg.
Summers, Joseph S., Jr., 114 W. Circle Drive
Tanner, Robert H., 1408 Greenberry Rd.
Taylor, Herbert I., 111 E. Circle Drive
Taylor, Leon A., 129 East High St.
Watts, Byron E., 234 Madison Ave.

COOPER COUNTY MEDICAL SOCIETY

Abele, William A., Boonville
Beckett, Theodore C., Boonville
Boley, James O., 3200 E. Meyer Blvd., Kansas City
Brown, D. J., Boonville
Chamberlain, Gilbert L., New Franklin
Diekroeger, Manuel L., Boonville
Hata, Daikichi, Boonville
Humphreys, Edward T., Boonville
Sandy, Charles, Prairie Village, Kansas
Stone, William E., Boonville
Stuart, Byron M., Boonville
Wilcox, Howard L., 20 Oak St., Belmont, Mass.
Winn, George W., Boonville
Ziegler, William H., Boonville

CRAWFORD COUNTY

(Mid-Missouri County Medical Society)

DADE COUNTY

(Barton-Dade County Medical Society)

DALLAS-HICKORY-POLK COUNTY MEDICAL SOCIETY

Barnett, C. H., Bolivar
Brooks, John M., Diamond
Glasco, Loren A., Urbana

Griffin, Mary E. P., Buffalo
Griffin, Olin A., Jr., Buffalo
Harrell, Henry J., Morrisville
McCraw, Doyle C., Bolivar
Plummer, Grover C., Buffalo
Robinson, George G., Humansville

DAVIESS COUNTY

(Grand River Medical Society)

DEKALB COUNTY

(Grand River Medical Society)

DENT COUNTY

(Mid-Missouri County Medical Society)

DOUGLAS COUNTY

(South Central Counties Medical Society)

DUNKLIN COUNTY MEDICAL SOCIETY

Bailey, S. M., North Shore Hospital, Valley Road, Manhasset, L. I., N. Y.
Baldwin, Paul, Kennett
Beal, Homer, Malden
Belsey, Wallace A., Campbell
Croom, Dorwyn W., Malden
Dempsey, D. T., Kennett
Dunmire, George Q., Kennett
Edmondson, Charles T., Malden
English, Wallace D., Cardwell
Fuzzell, Jameso, Kennett
Green, Robert S., Kennett
Hopkins, F. G., Gideon
Linton, C. S., Kennett
Miltenberger, Paul C., Kennett
Mitchell, Samuel E., Malden
Mohler, Elbert M., Jr., Senath
Palenski, Robert L., Hornersville
Park, William E., Cardwell
Peck, Chester R., Jr., Kennett
Rutledge, William J., Campbell
Speidel, Frederick W., Senath
Spence, Elbert L., Kennett
Tarver, Quinton, Kennett
Van Cleve, John D., Malden
Wilson, Loys C., Kennett
Zimmerman, Joseph A., Kennett

FRANKLIN-GASCONADE-WARREN COUNTY MEDICAL SOCIETY

Andreassen, Dimil F., Dillingham, Alaska
Bozzo, Raymond J., Washington
Brenner, Paul A., Owensville
Briegleb, Charles F., 4624 Cedar Oaks Lane, Belaire, Texas
Crawford, Robert M., Sullivan
de la Torre, John J., Sullivan
Denny, Hubert M., Union
Ecker, Decider B., Pacific
Eisenmann, Benj. P., New Haven
Eyermann, H. W., Warrenton
Hoelscher, Harold F., Warrenton
Johnson, Grover C., Marthasville
Keller, Robert M., Owensville
Kitchell, William E., St. Clair
Mayfield, James L., Washington
Mays, Frank G., Washington
Muench, Ludwig O., Washington
Pearl, John F., St. Clair
Peterson, Merle H., Address Unknown
Post, J. P., Washington
Richardson, William R., Union
Royse, Roy P., Sullivan
Ryan, John B., Hermann
Schmidt, Charles A., Washington
Schmidt, Herbert H., Washington
Schwartz, Alfred J. C., 4727 N. Malden Ave., Chicago 40, Ill.
Shaw, Carvel T., 5107 Blanco, El Paso, Texas
Steinbeck, Herbert D., Union
Strehlman, Benjamin G., Union
Wepprich, Michael S., Washington
Workman, George M., Hermann

GASCONADE COUNTY

(Franklin-Gasconade-Warren County Medical Society)

GENTRY COUNTY

(Nodaway-Atchison-Gentry-Worth County Medical Society)

GRAND RIVER MEDICAL SOCIETY

(Caldwell-Carroll-Livingston-Grundy-Daviess-Harrison-Linn-Mercer-DeKalb Counties)

Allen, Erroll W., Carrollton
Atwood, William G., Carrollton
Bales, Eugene L., Carrollton
Berry, Paul T., 3390 Adams St., Carlsbad, Calif.
Bohnsack, Ralph W., Brookfield
Booth, Herbert R., Hamilton
Breid, Jacob, Trenton
Brennan, Raymond J., Chillicothe
Brewer, Lake, Ridgeway
Bristow, Arthur S., Princeton
Bristow, George B., Osceola, Ia.
Brownfield, Samuel T., Brookfield
Broyles, Watkins A., Bethany
Carpenter, George W., Chillicothe
Carter, Howard, Hamilton
Clark, Chester Lee, Trenton
Collier, Alfred, Chillicothe
Conrad, Joseph, Chillicothe
Cullers, Charles H., Trenton
Daley, Frank R., Hamilton
Dixon, John R., Brookfield
Dowell, Donald M., Chillicothe
Dowell, Horace S., Chillicothe
Duffy, Edgar A., Trenton
Duffy, Oliver F., Trenton
Ellis, William W., Marceline
Fair, William L., Chillicothe
Fuson, William A., Trenton
Gale, Joseph F., Chillicothe
Gary, George, Marceline
Gearhart, M., Bethany
Grace, Charles M., Chillicothe
Haley, Roy R., Brookfield
Haskell, Ralph E., Norborne
Johnson, Glenn D., Maysville
Kimberlin, Herbert C., Trenton
Lambert, Marian, Address Unknown
Lee, Leonard R., 7505th USAF Hospital, APO 232, New York, N. Y.
Lucas, John H., Brookfield
McArtor, Thomas R., Browning
Magill, Joseph S., Milan
Mairs, Edgar J., Trenton
Mandler, George, Chillicothe
Martin, John N., Chillicothe
Nixon, Edward E., Gallatin
Parker, John Z., Pattonsburg
Perry, John M., Princeton
Platz, John H., Carrollton
Quisito, Joseph M., Trenton
Sellers, C. J., Mt. Moriah
Smith, Robert W., Marceline
Staton, R. Hamilton, Carrollton
Sweiger, James H., 501 Armored Medical Co., APO 800, New York, N. Y.
Thompson, Emma A. B., Columbia
Vandiver, Virgil D., Chillicothe
Webb, J. W., Brenkenridge
Weston, Ursa C., Galt
Wilson, Fred K., Winston
Zahrt, Frank H., Princeton

GREENE COUNTY MEDICAL SOCIETY

(Springfield)

Allen, Jerry H., 1211 S. Glenstone
Anthony, Dallas, Professional Bldg.
Ashley, Thomas E., 1211 S. Glenstone
Atherton, Mary Jean, McDaniel Bldg.
Barber, John J., Address Unknown
Bonebrake, M. D., Professional Bldg.
Box, Earnest M., 412 E. Commercial St.
Brown, Lyman D., 307½ College
Bruton, Tyrrel S., 659 Kimbrough
Burke, Walter H., Woodruff Bldg.
Busiek, Paul J., 303 Professional Bldg.
Busiek, Urban J., 303 Professional Bldg.
Callaway, Guy D., 1211 S. Glenstone
Callaway, Guy D., Jr., 1211 S. Glenstone
Chinburg, Kenneth, Medical Arts Bldg.
Clarke, Michael J., Morton Bldg.
Clayton, Edgar L., 109 Professional Bldg.
Coffelt, Kenneth C., 800 Medical Arts Bldg.
Coller, Frederick C., 1211 S. Pickwick
Conrad, Raymond C., 609 Cherry St.
Craig, Arthur D., 1046 E. Delmar
Crawford, Oral B., 215 Professional Bldg.
Cunningham, Darral D., 1715 Boonville
Delzell, William A., 410 McDaniel Bldg.
Dietz, M. Wendell, Infirmary, Naval Air Station, Norfolk, Va.
Dillard, Erin M., Professional Bldg.
Dills, Joseph N., Professional Bldg.
Dimond, Edgar A., 1514 Fairway Dr.
Duncan, Robert D., 302 Professional Bldg.
Elkins, Ronald F., 402 Professional Bldg.
Ellis, Francis J., 304 Professional Bldg.
Epps, Curtis, 800 Medical Arts Bldg.
Evans, Ezra L., Jr., Professional Bldg.
Farthing, Fred R., 1234 E. Walnut St.
Farthing, Gene W., Medical Arts Bldg.
Feller, C. E., 609 Cherry St.
Ferguson, John P., Jr., 1219 S. Clay
Ferrell, Thomas E., Jr., Professional Bldg.
Fessenden, Ersel M., 634 Kingsbury
Fitch, C. H. Max, 1711 Boonville
Focht, Ralph H., Strafford
Francis, William C., Medical Arts Bldg.
Freeman, Hal E., 609 Cherry St.
Fulbright, James H., 1033 E. Walnut
Gentry, Merritt L., 432 Medical Arts Bldg.
Glenn, Elmer E., 1643 E. Catalpa St.
Glynn, Robert R., 1211 S. Glenstone
Good, James T., 1211 S. Glenstone
Gorelick, David F., 111 Professional Bldg.
Gose, Don Ferrell, Professional Bldg.
Hall, Durward G., 1211 S. Glenstone
Hanan, Ernest B., 675 S. Kickapoo
Hansbro, Gerald L., Professional Bldg.
Hanss, Armand W., Medical Arts Bldg.
H'Doubler, Francis T., 406 Professional Bldg.
H'Doubler, Francis T., Jr., 406 Professional Bldg.
Heimburger, Leroy F., Medical Arts Bldg.
Hogeboom, George W., 208 Professional Bldg.
Hoover, H. Lee, Jr., 208 Professional Bldg.
Horst, Otto C., Medical Arts Bldg.
Horton, James D., 405 Professional Bldg.
Huffman, Elston R., V. A. Hospital, Denver, Colo.
Ivy, Henry B., Holland Bldg.
James, Joseph D., 304 Professional Bldg.
Johnson, Warford B., 220 Professional Bldg.
Johnson, William F., 211 Professional Bldg.
Johnston, Joseph L., 1919 S. Jefferson
Klingner, George M., R. 9, Box 445
Knabb, Arthur D., 1630 N. Jefferson
Knabb, Harris, 1630 N. Jefferson
Knabb, Henry F., 1630 N. Jefferson
Knabb, Henry F., Jr., 1630 N. Jefferson
Knabb, Kenneth E., 1630 N. Jefferson
Langston, Walter R., 408 Professional Bldg.
Leidinger, Karl J., Republic
Lemmon, George B., 1101 E. Walnut St.
Lemmon, G. Bruce, Jr., 407 Professional Bldg.
Leslie, James F., 222½ E. Commercial
Litton, Lyle D., Burge Hospital
Lockhart, Charles E., 105 Professional Bldg.
Lowe, Horace A., 700 Medical Arts Bldg.
Lowe, Horace A., Jr., 342 Medical Arts Bldg.
Lurie, Harold H., 10 Luster Blvd.
Maddux, William P., 209 Professional Bldg.
Maher, Robert W., 226 Professional Bldg.
Marcus, Edward, Woodruff Bldg.
Marshall, Homer C., Professional Bldg.
Marshall, W. J., 305 Professional Bldg.
Meyer, Claude B., 410 McDaniel Bldg.
Morton, Paul C., 1508 E. Stanford
Musick, James D., Medical Arts Bldg.
Napper, Marvin L., Professional Bldg.
O'Brien, James A., Medical Consultant, c/o McCracken County Health Dept., Paducah, Ky.
Orr, Charles H., Ash Grove
Park, William I., Jr., 209 Professional Bldg.
Penninger, William H., Medical Arts Bldg.
Peterson, Stanley S., 1211 S. Glenstone
Pickens, E. Allen, Nevada
Plumlee, William C., 415 Holland Bldg.
Powell, Edwin M., Professional Bldg.
Rainwater, E. H., 223 Professional Bldg.
Rigney, Levi M., 505 Woodruff Bldg.
Rosen, Max, Medical Arts Bldg.
Russell, Earl D., 1951 S. National
Schwartz, Eugene J., 301 Professional Bldg.
Schweitzer, Fred C., Jr., Woodruff Bldg.
Sewell, Walter S., Professional Bldg.
Siceluff, Joseph G., 609 Cherry St.
Silsby, Don H., 326 Landers Bldg.
Silsby, Don James, 303 McDaniel Bldg.
Silsby, Harry D., 208 Professional Bldg.
Simpson, Emerson L., 1630 N. Jefferson
Smith, C. Souter, 513 Holland Bldg.
Snead, William H., Jr., 103 Professional Bldg.
Stewart, R. Wendell, 203 Professional Bldg.
Sundstrom, Frank D., 1211 S. Glenstone
Tarrasch, E. L., Woodruff Bldg.
Taylor, William E., Southwest Missouri State College
Thomasson, David D., 1630 N. Jefferson
Tillman, Walter W. Jr., 215 Professional Bldg.
Tsang, John L. K., Professional Bldg.
Turner, Glenn O., 307 Professional Bldg.
Upshaw, Paul O., Medical Arts Bldg.

Vail, A. Denton, 407 Professional Bldg.
Wakeman, Jasper N., 626 Woodruff Bldg.
Walsh, William T., P. O. Box 144, Kingwood, W. Va.
Webb, Leslie R., 1254 E. Meadowmere
Webb, Leslie R., Jr., 401 Professional Bldg.
White, R. Ned, 205 Professional Bldg.
Williams, John W., 201 Professional Bldg.
Williams, John W., Jr., 710 Landers Bldg.
Williams, Robert F., 710 Landers Bldg.
Wise, Gordon F., 215 Professional Bldg.
Wood, William W., 1211 S. Glenstone
Wooldridge, W. E., 100 Professional Bldg.
Yancey, Daniel L., 1211 S. Glenstone

GRUNDY COUNTY

(Grand River Medical Society)

HARRISON COUNTY

(Grand River Medical Society)

HENRY COUNTY MEDICAL SOCIETY

Baggerly, Walter E., Montrose
Blackmore, Thomas A., Windsor
Douglas, Thomas H., Jr., R. 2, Box 78, Camarillo, Calif.
Hollingsworth, Ray S., Clinton
Hughes, Shelby B., Clinton
Jennings, Robert J., Windsor
Jordan, Ray B., Windsor
Smith, James O., Clinton
Thurber, Claude M., Windsor
Walker, George S., Clinton
Walker, Hugh B., Clinton
Wall, Harvey M., Windsor
Woltzen, Samuel W., Urich

HICKORY COUNTY

(Dallas-Hickory-Polk County Medical Society)

HOLT COUNTY MEDICAL SOCIETY

Hogan, Frank E., Mound City
Kearney, Elmer F., Oregon
Perry, David C., Mound City
Sweaney, Isaac F., Oregon

HOWARD COUNTY MEDICAL SOCIETY

Allen, William C., Glasgow
Bloom, W. A., Fayette
Dean, Francis D., Fayette
Gardner, Joseph W., Glasgow
Leech, Maurice P., Fayette
Shaw, William J., Fayette
Shaw, William J., Jr., Fayette

HOWELL COUNTY

(South Central Counties Medical Society)

IRON COUNTY

(Mineral Area County Medical Society)

JACKSON COUNTY MEDICAL SOCIETY

(Kansas City)

Aaron, George A., 123½ W. Lexington, Independence
Adams, Noah, 1024 W. Alton, Independence
Adelman, Arthur, P. O. Box 202, Yachats, Oregon
Ahlefeld, Charles B., 215 Pershing Rd.
Aisenstadt, E. Albert, 1204 W. 67th St.
Allebach, H. K., Research Hospital
Allen, Charles E., 712 Waldheim Bldg.
Allen, Charles H., First Natl. Bank Bldg., Independence
Allen, Robert E., 411 Nichols Rd.
Allen, Sylvia, 4635 Wyandotte St.
Allen, William B., 411 Alameda Rd.
Alsop, Webb S., Jr., 411 Nichols Rd.
Altomare, Edward P., 1030 E. Pacific
Altringer, Arthur N., 305 W. 43rd St.
Anderson, A. Isadore, 723 W. 45th St.
Anderson, Raymond B., Plaza Time Bldg.
Anderson, Richard W., 21 W. 58th St.
Andrews, Berneil W., 710 Professional Bldg.
Andrus, Bailey C., 233 Plaza Medical Bldg.
Arms, Arnold V., 4635 Wyandotte
Arroyo, Alfonso S., Independence San. & Hosp., Independence.
Aschman, Theodore H., 174 Plaza Time Bldg.
Asel, Norman D., Plaza Time Bldg.
Asher, A. Graham, 1220 Professional Bldg.
Atcheson, Bellfield, 5215 Sunset Drive
Atwell, Floyd C., 226 Plaza Time Bldg.
Aull, John, 1306 Professional Bldg.
Bachmann, Paul L., 1212 W. Truman, Independence
Baer, Alvin J., 1404 Bryant Bldg.
Baker, Philip J., Blue Ridge Cut-off & New 40 Highway
Ball, James E., 1102 E. 47th St.
Ballard, V. Bryce, 209 Plaza Time Bldg.
Barelli, Pat A., 194 Plaza Time Bldg.
Barnett, Gordon P., 6333 Brookside Plaza
Barry, Gerald W., 3601a Troost Ave.
Barry, John W., General Hospital No. 1
Barry, William B., 116 W. 47th St.
Baum, Frank E., 701 E. 63rd St.
Baumhardt, Edward E., 4635 Wyandotte
Bay, Merrill R., Blue Springs
Becker, Richard R., 4000 Baltimore
Bee, James E., 3520 Broadway
Beil, J. Wallace, 1205 W. 59th St.
Belaval, Gustavo S., 2018 Chester, Kansas City, Kansas
Bell, William F., 18 E. 3rd St., Lee's Summit
Belot, Monti L., 1440 W. Lexington Ave., Independence
Bennett, James D., 409 E. 63rd St.
Benoit, Hector W., Jr., 618 Professional Bldg.
Berenson, Sheldon E., St. Luke's Hospital
Berger, Dan L., Plaza Time Bldg.
Bergmann, Victor H., 1120 Professional Bldg.
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Robison, James T., Jr., 411 Nichols Road
Rodgers, Samuel U., 2462a Brooklyn Ave.
Rose, Charles W., 103 N. Elmwood
Rubin, Sidney, 410 Professional Bldg.
Rubnitz, Leon H., 701 E. 63rd St.
Rufe, Jack R., 2003 Bryant Bldg.
Russell, Robert K., 63rd & Blue Ridge Rd., Raytown
Saferstein, A. Lester, 6859 Cherry
Saladino, Anthony, 1040 Argyle Bldg.
Samuelson, Edward A., 2603 E. 31st St.
Sanders, Harmon U., Jr., 404 First Natl. Bank Bldg., Independence
Sanders, William F., 6419 Wornall Terrace
Saper, Philip, 3 E. 3rd St., Lee's Summit
Sauer, Gordon C., 425 E. 63rd St.
Saunders, Everett L., 411 First Natl. Bank Bldg., Independence
Sawyers, Gordon E., 830 Argyle Bldg.
Scarpellino, Louis A., 36 E. 52nd St.
Schaerrer, Hans, 314 Shukert Bldg.
Schaerrer, William C., 4635 Wyandotte St.
Schaffer, Richard C., St. Mary's Hospital
Schauffler, Robert M., 518 W. 10th St.
Schiffmacher, Jack E., 700 Professional Bldg.
Schorer, Edwin H., 1910 W. 56th St.
Schottman, Gerhard W., Jr., 4504 Cambridge Ct.
Schultz, Loraine E., 1025 N. 22nd St., Kansas City, Kansas
Schutz, Carl B., 320 W. 47th St.
Schutz, Richard B., Plaza Time Bldg.
Seely, Clark W., Plaza Time Bldg.
Sewell, Minor F., 1722 W. 39th St.
Shapiro, Lazare M., 701 E. 63rd St.
Shelden, Russell D., 701 E. 63rd St.
Shelden, John, Vineyard Park Hospital
Sherman, Paul H., 231 Plaza Time Bldg.
Shifrin, Alexander, 6709 Locust St.
Shireman, Kenneth L., 4126 St. John
Shofstall, Charles K., 300 West 47th St.
Shofstall, William H., 300 West 47th St.
Shook, Lester D., 830 Argyle Bldg.
Shuey, Herbert H., 3903 Brooklyn Ave.
Shumate, David L., 500 Argyle Bldg.
Shypper, Moses J., 4738 Oak St.
Simon, Sanford, 701 E. 63rd St.
Simpson, Morris B., 1408 Professional Bldg.
Sinclair, Alexander B., 4711 Central St.
Singleton, J. Milton, 315 Alameda Road
Skillman, Robert K., 4635 Wyandotte St.
Skinner, John O., 1402 Bryant Bldg.
Skinner, John T., 1402 Bryant Bldg.
Skoog, Andrew L., 919 Rialto Bldg.
Slentz, Edwin L., 215 Plaza Medical Bldg.
Slentz, William A., Plaza Medical Bldg.
Slusher, Ernest W., 806 Rialto Bldg.
Small, Walter L., Hyde Park Hotel
Smith, Arthur B., 830 Argyle Bldg.
Smith, Hubert E., 231 Plaza Time Bldg.
Smith, Ira T., 1019 Professional Bldg.
Smull, Ned W., Plaza Time Bldg.
Sneid, Philip, 701 E. 63rd St.
Snider, Samuel H., 221 Plaza Medical Bldg.
Soderberg, N. B., Address Unknown
Sophian, Abraham, 1405 Bryant Bldg.
Spafford, Allen L., 1414 Professional Bldg.
Stacey, Wallace R., 1707 Sterling, Independence
Staggs, William A., 822 Argyle Bldg.
Staley, Harry R., 520 Bryant Bldg.
Stanley, Charles G., 522 Professional Bldg.
Statland, Harry, 1406 Bryant Bldg.
Statland, Morris, 701 E. 63rd St.
Steffen, Lawrence F., 1220 Professional Bldg.
Stegman, Elmer G., Raytown Clinic, Raytown
Stelmach, Walter J., 408½ W. 75th St.
Stewart, Robert H., 2203 E. 68th St.
Stockton, Raymond W., 411 Nichols Rd.
Stockwell, A. Lloyd, 600 Professional Bldg.
Stratemeier, Edward H., General Hospital No. 1
Summers, Caldwell B., 222 Plaza Theatre Bldg.
Swisher, Robert C., 425 E. 63rd St.
Switzer, Clyde, R. R. 2, Grandview
Tabris, Julius A., 411 Nichols Road
Tamblyn, Claire L., 7613 Rainbow Drive
Tarson, Solomon S., 3221 Troost
Tasker, Charles B., 730 Professional Bldg.
Teall, Raymond E., 1016 Professional Bldg.
Tesson, James A., 907 Rialto Bldg.
Theel, Otto W., Jr., 123 E. 39th St.
Thiele, George H., 6526 High Drive
Thiessen, Edward H., 116 W. 47th St.
Thomas, Christopher Y., 315 Nichols Rd.
Thomason, Henry E., Summers, Ark.
Thorn, Druery R., 1107 Bryant Bldg.
Treharne, Frank E., 301 W. Kansas Ave., Independence
Trippe, Harrison C., 6247 Brookside
Trowbridge, Barnard C., 415 East 63rd St.
Trowbridge, Ellsworth H., 1905 Bryant Bldg.
Trowbridge, Ellsworth H., Jr., 1905 Bryant Bldg.
Turner, Percy C., 1433 E. 19th St.
Tuthill, Herbert, 1211 Rialto Bldg.
Tuttle, Floyd W., 308 S. Bluff, Clinton, Iowa
Twin, Edward J., 701 E. 63rd St.
Twyman, Elmer D., 750 W. 47th St.
Twyman, Richard A., 4635 Wyandotte St.
Underwood, Dick H., 1107 Bryant Bldg.
Underwood, Harry A., 5100 E. 24th St.
Underwood, Johnson, Jr., 1600 Professional Bldg.
Underwood, Ross H., 1107 Bryant Bldg.
Unger, Harold, 701 E. 63rd St.
Upsher, Albert E., Blue Springs

Valentine, Herbert S., 1124 Professional Bldg.
VanBiber, James T., 317 W. Kansas Ave., Independence
VanBuskirk, William C., 1416 Professional Bldg.
VanDel, Dwight T., 701 E. 63rd St.
Vilmer, Charles, 1216 Professional Bldg.
Vincent, Jack C., 701 E. 63rd St.
Virden, C. Edgar, 700 Professional Bldg.
Virden, Herbert H., 700 Professional Bldg.
Wade, Frederick E., 202 Professional Bldg.
Wakefield, Franklin, Jr., 2004 Bryant Bldg.
Walker, James C., 318 Professional Bldg.
Walker, John W., 830 Argyle Bldg.
Wall, Arthur H., 153 Santa Anita, Sierra Madre, Calif.
Wall, Harry C., 1116 Professional Bldg.
Wallace, Frank B., Rialto Bldg.
Walthall, Damon O., 315 Nichols Road
Ward, Robert L., 3626 Independence Ave.
Watson, Ethel, 403 First Natl. Bank Bldg., Independence
Waxman, David, 4802 Prospect Ave.
Waxman, Jane Z., 4802 Prospect Ave.
Weaver, John L., General Hospital No. 1
Webster, Joseph G., 1400 Professional Bldg.
Weiford, Edward C., 320 West 47th St.
Welker, Joseph E., 834 Professional Bldg.
Weltscheff, Christo A., 215 Argyle Bldg.
Werner, Franklin C., 522 Professional Bldg.
Wheeler, John H., 411 Alameda Road
White, Charles H., 4125 Brookridge, Mission, Kansas
White, Edwin C., 1032 Professional Bldg.
White, George A., 729 Shukert Bldg.
White, Stoughton F., 710 Professional Bldg.
Whiteman, John R., 6314 Brookside Plaza
Whitman, Doyle C., 1003 Sharp Bldg.
Wien, Irving A., 321 Argyle Bldg.
Wiley, J. LaRue, Plaza Time Bldg.
Wilhelm, Warren F., 107 W. Linwood
Wilkerson, Daniel C., Jr., Alta Vista, Va.
Wilkinson, Everett A., 1332 Professional Bldg.
Williams, Delon A., 806 Professional Bldg.
Williams, Frank R., 1227 Roanoke, Springfield
Williams, Joseph C., Jr., 423 E. 63rd St.
Williams, Luke E., 2201 E. 27th St.
Williams, Robert A., 5400 St. John Ave.
Williams, Starks J., 2462a Brooklyn Ave.
Williams, Vincent T., 836 Argyle Bldg.
Willits, Lyle G., 1515 Professional Bldg.
Willoughby, Jean B., 1032 Professional Bldg.
Wilson, Clifford C., 217 Plaza Time Bldg.
Wilson, Hester J., 233 Plaza Time Bldg.
Winer, Herbert J., General Hospital No. 1
Winkelman, Esther B., 7449 Broadway
Winston, Bernard H., 324 Professional Bldg.
Wise, George W., 204 Plaza Time Bldg.
Withers, Orval R., 1418 Bryant Bldg.
Wolf, Jack W., 409 East 63rd St.
Wood, Laurence E., Plaza Time Bldg.
Woods, Harold V., 121½ W. Lexington, Independence
Wortmann, Robert F., 423 E. 63rd St.
Wright, R. Paul, 1324 Professional Bldg.
Wu, William Q., 63rd & Holmes
Yazel, Herman E., 733 Rialto Bldg.
Young, James E., 4635 Wyandotte
Young, Jesse W., 1401 Southwest Blvd., Kansas City, Kansas
Zellermayer, Jacob, 701 E. 63rd St.
Ziegler, Allen M., 320 W. 47th St.
Zoglin, Nathan M., 927 Argyle Bldg.
Zuber, Harold V., 600 Professional Bldg.

JASPER COUNTY MEDICAL SOCIETY

(Joplin)

Alberty, Omer L., Carl Junction
Barnett, Norman H., 701 1st Natl. Bldg.
Birsner, Frank H., Carthage
Black, Mervin H., 516 Frisco Bldg.
Blanke, Otto T., 725 Frisco Bldg.
Bragdon, George H., Reeds
Burch, John E., 804 Frisco Bldg.
Butterworth, Nelson S., 910 Kensington Road
Byrd, Homer E., Carthage
Coates, Charles C., Frisco Bldg.
Cohle, Richard R., Carthage
Craig, Irwin T., 829 Frisco Bldg.
Craig, William E., Address Unknown
Crawford, Archie L., 631 Frisco Bldg.
Crispell, Lawrence S., 6th & Pearl Ave.
Curl, Howard, 410 Jackson St.
DeTar, Burleigh E., 410 Jackson St.
DeTar, Burleigh E., Jr., 410 Jackson St.
Douglas, John W., 32nd & Oak Ridge
Douglass, Jesse E., 3427 W. Coleman Rd., Kansas City
Eliscu, Juliette, Frisco Bldg.
Ferguson, Ralph L., Frisco Bldg.
Ferguson, Robert M., Webb City
Grantham, Samuel A., Jr., 420 Byers
Graves, F. Burton, Frisco Bldg.
Hall, Marvin F., 622 Frisco Bldg.
Hamilton, Eugene H., 325 Frisco Bldg.
Holtzman, Samuel, 811 Frisco Bldg.
Hornback, Edward R., 215 Frisco Bldg.
Howard, Walter M., 301 Frisco Bldg.
Hurst, W. W., Joplin National Bank Bldg.
Isbell, Charles H., Carthage
Jackson, L. S., 410 Jackson St.
James, Edward D., 826 Frisco Bldg.
James, Robert M., 504 Jackson
Jeans, Virgil, 511 Joplin National Bank Bldg.
Kenney, Verna E., Miners Bank Bldg.
Kiehl, Katharine, DeTar Clinic
Kirschman, Robert E., 215 Frisco Bldg.
Koehler, John W., Frisco Bldg.
Kuhn, John R., Jr., 321 Frisco Bldg.
Laney, Ronald L., Webb City
McIntire, Emery J., Carthage
McNew, William T., Carthage
McPike, Lloyd H., 607 Frisco Bldg.
Mack, Mary L., 602 N. Byers
Maddox, John D., 528 Pearl St.
Meinhardt, Ralph E., Flight Surgeons Office, Vance A.F.B., Enid, Okla.
Mitchell, Ernest, Goodman
Myers, Roy E., Frisco Bldg.
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Poor, Carl W., Neosho
Post, Winfred L., 617 Joplin St.
Putnam, John A., Carthage
Reid, Charles T., 614 Hampton Place
Rosenthal, Frances E., 724 Frisco Bldg.
Saylor, Robert K., 2801 E. 12th St.
Schoeberl, C. B., 327 N. Moffet
Schulte, G. A., 622½ Main St.
Scorse, Sidney W., Frisco Bldg.
Simmons, Leroy, Sarcoxie
Sims, John L., 201 N. Jackson Ave.
Smith, Roland T., 821 Frisco Bldg.
Smith, William R., Carthage
Stormont, Riley M., Webb City
Sutphin, John B., 212 S. Florissant, Ferguson
Van Urk, Jules B., Carthage
Walker, Paul W., Frisco Bldg.
Webster, Roger W., 369 Crest Drive, San Jose, Calif.
Whitten, M. Foster, Carthage
Wieman, Harry K., 718 Frisco Bldg.
Wilson, Alice H., 1923 Sergeant
Wood, George H., Carthage
Wright, George W., Webb City
York, William B., Sarcoxie

JEFFERSON COUNTY MEDICAL SOCIETY

Bolgar, Bartholomew, Festus
Commerford, James J., Crystal City
Dobbins, Thomas, Box 76, Greencastle, Ind.
Donnell, Harold E., Address Unknown
Donnell, Robert H., Crystal City
Donnell, Thomas A., DeSoto
Edwards, T. Burton, Cedar Hill
Edwards, Waldo B., Cedar Hill
Fallet, Chas. E., DeSoto
McKinstry, Karl V., DeSoto
Reich, Oliver F., Kimmswick
Rice, Carl E., Hillsboro
Rutledge, John F., Crystal City
Senn, Emmett J., Herculaneum
Yoskit, Harry, Festus

JOHNSON COUNTY MEDICAL SOCIETY

Cooper, R. Lee, Warrensburg
Damron, Oscar H., Warrensburg
Grove, Gulph W., Knob Noster
Harkness, Harry, Warrensburg
Holmes, David R., Warrensburg
Johnson, Charles S., Warrensburg
Lederer, Charles M., Warrensburg
Maxson, T. Reed, Warrensburg
Patterson, William R., Warrensburg
Rawlins, Kelly, Holden

KNOX COUNTY

(North Central Counties Medical Society)

LACLEDE COUNTY

(Mid-Missouri County Medical Society)

LAFAYETTE-RAY COUNTY MEDICAL SOCIETY

Best, Robert, Higginsville
Brady, Hugh S., Concordia
Brasher, Ben H., Lexington
Buehrer, Cletus E., Lawson
Bumgarner, James E., 5201 W. 72nd St., Prairie Village, Kansas
Cope, Joseph S., Lexington
Crozier, Franklin A., Richmond
Davault, George K., Richmond
Fulkerson, Wilbur E., Higginsville
Goldberg, Isadore E., Braymer
Greene, Luther D., Richmond
Johnson, M. C., Richmond
Kelling, Douglas G., Waverly
Kelling, George A., Waverly
Kelling, Jordan, Waverly
Koppenbrink, Walter E., Jr., Higginsville
Lissack, Edmund, Concordia
Liston, Odus, Oak Grove
Martin, Joseph L., Odessa
Martin, Wilfred E., Odessa
Masterson, Melvin L., 54 Bolling St., Waco, Texas
Nisbet, Eliga B., Odessa
Payne, Bryan T., Lexington
Riley, Ralph W., Lexington
Ryland, Caius T., Lexington
Schooley, Renick C., Odessa
Ward, Joe, Lexington
Williams, John W., Oak Grove
Willis, John B., Mayview

LAWRENCE COUNTY

(Ozarks Medical Society)

LEWIS-CLARK-SCOTLAND COUNTIES MEDICAL SOCIETY

Bridges, James R., Kahoka
Davis, Landis Y., Canton
Ellery, William L., LaGrange
Jennings, Perry W., Canton

LINCOLN-ST. CHARLES COUNTY MEDICAL SOCIETY

(St. Charles)

Budke, Robert J., 126 Main St.
Canty, Eugene J., R. R. 1
Clay, Calvin, 106 Washington St.
Creech, Joseph C., Troy
Crider, Russell J., St. Charles Hotel Bldg.
Damron, Edward O., Elsberry
Greene, Maurice L., 114 N. Main St.
Hetlage, Louis P., Troy
Hicks, Edward A., Troy
Jenkins, Joseph M., 117 S. Main St.
Kister, George E., 818 N. Second St.
Klink, Lon B., 313A Fenwick Road, Fort Monroe, Va.
McIntire, Landon R., 117 S. Main St.
McMurray, Herbert C., Wentzville
Muschany, Norman K., Troy
Neubeiser, Ben L., 206 Washington St.
Penn, Robert M., Silex
Poggemeier, William H., Jr., 200 Clay St.
Randall, Don Q., 207 N. 5th St.
Reeves, Gerald A., 207 N. 5th St.
Rother, Paul H., 114 N. Main St.
Rugh, Walter B., 16 E. Jefferson St.
Schneider, Vincent A., 207 N. 5th St.
Towers, Orville W., 114 N. Main St.
Weyrens, F. P., 207 N. 5th

LINN COUNTY

(Grand River Medical Society)

LIVINGSTON COUNTY

(Grand River Medical Society)

MCDONALD COUNTY

(Ozarks County Medical Society)

MACON COUNTY

(Chariton-Macon-Monroe-Randolph County Medical Society)

MADISON COUNTY

(Mineral Area County Medical Society)

MARIES COUNTY

(Mid-Missouri County Medical Society)

MARION-RALLS-SHELBY COUNTY MEDICAL SOCIETY

(Hannibal)

Archer, Perry C., Shelbyville
Birney, William P., 1003 Broadway
Brown, John E., Perry
Burns, Francis R., 226 Broadway
Canella, John M., 707 Broadway
Chilton, James C., 500 Broadway
Ellis, Sam T., 1609 Harrison Hill
Francka, W. F., 228 Broadway
Goodrich, Howard B., Box 1383, Winter Park, Fla.
Greene, Harry L., Holmes Bldg.
Hamlin, Wyeth, Palmyra
Hardesty, Joel W., Holmes Bldg.
Hoerchler, T. J., Shelbina
Hornback, George A., 500 Broadway
Johnson, Charles R., Monroe City
Kibbe, John H., Monroe City
Landau, Daniel B., 228 Broadway
Lanning, Robert J., 228 Broadway
Levine, Ervan L., Vandalia
Lucke, Eugene M., Court House
Murphy, Bernard L., 2000 Crescent Dr.
Reichman, John J., 1001 Broadway
Roller, Merrill J., 228 Broadway
Smith, Ulysses S., Trust Bldg.
Smith, William J., 507 Hannibal Trust Bldg.
Strong, Richard M., 115 N. 5th St.
Sultzman, Francis E., 115 N. 5th St.
Walterschied, John H., 606 Mark Twain
Well, J. W., Palmyra

MERCER COUNTY

(Grand River Medical Society)

MID-MISSOURI COUNTY MEDICAL SOCIETY

(Phelps-Crawford-Dent-Pulaski-Maries-Laclede Counties)

Bass, B. J., Salem
Breuer, Robert E., Newburg
Butts, James D., Address Unknown
Campbell, John G., Steelville
Carlton, Charles E., Stoutland
Carrington, Howard W., Lebanon
Casey, Shederick A., Lebanon
Crosby, Alice S., Salem
Davis, Harry H., Rolla
Doubek, John C., Jr., U.S.S. Shangri La, CVA 38, c/o Fleet P.O., San Francisco, Calif.
Drake, Avery A., Rolla
Elders, Frank A., Jr., Cuba
Feind, Earl E., Rolla
Fisher, George E., Lebanon
Froelich, Rae W., Lebanon
Giem, Ross N., Rolla
Grosskreutz, Joseph A., St. James
Hammler, Christiana V., St. James
Hart, Martin M., Salem
Herzog, Gustav G. A., Cuba
Hope, James L., Lebanon
Hughes, Edgar O., Dixon
Hunt, Lloyd H., Salem
Hurst, Ben B., Lebanon
Irwin, William F., Leasburg
Jenkins, Paul A., Lebanon
Johnson, Ferrell H., Lebanon
Kozal, Francis L., Belle
Lindsay, John W., Conway
Lytle, William R., Rolla
McDonough, Robert C., St. James
Miller, Clyde S., Waynesville
Mitchell, Roy E., Salem
Myers, James M., Rolla
Peckham, John W., 327 Baker St., St. Louis
Russell, Barbara E., Rolla
Scott, Elijah A., St. James
Siniscal, A. A., Rolla
Stricker, Emil A., St. James
Summers, Jacob H., Lebanon
Underwood, Millard K., Rolla
Walden, Richard, Bourbon
Weeks, George R., Lebanon

MILLER COUNTY MEDICAL SOCIETY

Allee, Warren L., Eldon
Buehler, Carl T., Jr., Eldon
Shelton, Edward O., Eldon

MINERAL AREA COUNTY MEDICAL SOCIETY

(St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve Counties)

Appleberry, Charles H., Flat River
Bugg, Andrew F., Ellington
Bull, Ben M., Ironton
Carleton, Charles E., Jr., Farmington
Clapsaddle, Clare J., Ste. Genevieve
Cresswell, George F., Potosi
Crouch, F. Richard, Farmington
Evans, Albert L., Bonne Terre
Farrar, C. B., Flat River
Foster, Jack L., Desloge
Gaebe, Harold C., Desloge
Gay, George, Ironton
Grossman, Marvin, Fredericktown
Harland, R. E., Ironton
Haw, Marvin T., Jr., St. Elizabeth Hospital, Lafayette, Ind.
Hoctor, Emmett F., Farmington
Hunt, John W., Jr., Leadwood
Jones, Paul L., Flat River
Karraker, Alvan G., Farmington
Lanning, Richard C., Ste. Genevieve
Lanning Robert W., Ste. Genevieve
Martin, James H., Ironton
Michaelis, Charles E., Fredericktown
Mullen, Jack, Bonne Terre
Pyrtle, James R., Centerville
Roebber, Harry M., Bonne Terre
Roesler, Paul J., 4600th Infirmary U.S.A.F., A.F.B., Colorado Springs, Colo.
Sexauer, Arthur E., Ste. Genevieve
Slaughter, Shelby C., Fredericktown
Taylor, Van Wm., Bonne Terre
Watkins, George L., Jr., Farmington

MISSISSIPPI COUNTY

(Semo County Medical Society)

MONITEAU COUNTY MEDICAL SOCIETY

Burke, John P., Jr., 1122 Los Arboles Rd., N.W., Albuquerque, New Mexico

Fulks, Richard B., California
Gallagher, Lionel M., California
Kibbe, Edgar A., California
Latham, Kenyon S., California
Tarvydas, Francis, Edina

MONROE COUNTY
(Chariton-Macon-Monroe-Randolph County Medical Society)

MONTGOMERY COUNTY MEDICAL SOCIETY

Andersen, Elmer J. T., Montgomery City
Byland, Samuel J., Wellsville
Helm, James O., New Florence
Hirsch, Albert, Middletown

MORGAN COUNTY MEDICAL SOCIETY

Gunn, Aubrey J., Versailles
Gunn, Jack, Versailles
Kauffman, Ruth, Versailles
Lyle, Robert R., Versailles
Washburn, J. Loren, Versailles

NEW MADRID COUNTY
(Semo County Medical Society)

NEWTON COUNTY
(Ozarks County Medical Society)

NODAWAY-ATCHISON-GENTRY-WORTH COUNTIES MEDICAL SOCIETY

Bare, Edward F., Tarkio
Bauman, Henry C., Maryville
Bell, Charles T., Maryville
Blacklock, David E., King City
Byland, Benjamin F., Maryville
Carlin, Albert L., Stanberry
Carpenter, Wallace, Rockport
Coffey, James L., 2217 W. Main St., Emmetsburg, Iowa
Cossins, Carlos E., State Hospital No. 2, St. Joseph
Dean, Leslie E., Maryville
Dunshee, Robert E., Maryville
Humberd, Charles D., Barnard
Imes, Elvin D., Maryville
Jackson, William R., Maryville
Kirk, Charlie W., Hopkins
Matteson, Frank B., Grant City
Niedermeyer, Edward L., Tarkio
Rose, Frank H., Albany
Ross, Pren J., Grant City
Settle, Emmett B., Rockport
Wempe, G. Raymond, Maryville

NORTH CENTRAL COUNTIES MEDICAL SOCIETY
(Adair-Schuyler-Knox-Sullivan-Putnam Counties)

Cramb, Arthur B., Spofford, N. H.
English, Milton T., Jr., Kirksville
Freeman, Spencer L., Kirksville
Gerwig, Henry E., Downing
Hart, Pearl V., Coatsville
Henry, Clifford E., Kirksville
Holman, Jurney H., Unionville
Hudson, G. R., Kirksville
Humphrey, Henry M., Brashear
Jones, John B., Kirksville
Luman, Frank E., Edina
Miltenberger, Val E., Kirksville
Montgomery, John S., Milan
Nulton, Ida May, Lancaster
Rosenthal, Louis M., Greentop
Stickler, Ralph O., Kirksville
Sullivan, William J., V. A. Hospital, Davis Park, Providence, R. I.
Wimp, J. J., Kirksville

OREGON COUNTY
(South Central Counties Medical Society)

OSAGE COUNTY
(Unorganized)

OZARK COUNTY
(South Central Counties Medical Society)

OZARKS COUNTY MEDICAL SOCIETY
(Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald Counties)

Aubin, Francis W., Branson
Blankenship, George W., Anderson
Bowman, Melvin C., Neosho
Brasher, Charles A., Mt. Vernon
Burney, Wallace S., Miller
Capetti, Alex P., Aurora
Cardwell, Clarence, Stella
Carter, James R., Neosho
Coffman, Esther E. L., 4139a Connecticut St., St. Louis
Cohnberg, Rosellen E., Monett
Cottrell, Wilson P., Reeds Spring
Cowan, R. D., Aurora
Davis, Paul C., Neosho
Donley, Robert R., Monett
Edwards, Francis L., Monett
Eller, Byron H., 430 Pitsanuloke Road, Bangkok, Thailand
Evans, Harry T., Branson
Ferguson, Lewis H., Monett
Ferguson, L. H., Jr., Vet. Admin. Hospital, Clarksburg, W. Va.
Glover, Kenneth, Mt. Vernon
Graves, Arthur J., Mt. Vernon
Hellweg, Charles E., Mt. Vernon
Holmes, Lemuel I., Miller
Holmes, Prince A., Mt. Vernon
Imes, Clifford H., Army Sec. MAAG, APO 74, San Francisco, Calif.
Kerr, Frank T., Monett
Knowles, Harry P., L.B. 56, Rockaway Beach
Lamson, Roy C., Neosho
Lentz, Harold C., Neosho
McCallum, A. J. C., Aurora
Magness, William C., Branson
Maness, Charles E., Neosho
Maples, Floyd H., Mt. Vernon
Mickel, Arthur A., Cassville
Moennighoff, Fritz J., Monett
Newman, Mary J., Cassville
Ramsey, Ora W., Madison College, Tenn.
Reynolds, James R., Neosho
Rolens, Louis E., Granby
Roper, Stanley D., Ozark
Russell, James M., Monett
Shumate, L. St. Clair, Reeds Spring
Spears, Charles A., Pierce City
Stokes, Julius B., Excelsior Springs
Taylor, Leo T., Neosho
Threadgill, Jesse M., Forsyth
Whitehead, Frank F., Neosho
Wommack, Fred L., Crane

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Castles, Charles C., 3237 Acacia, Lemon Grove, Calif.
Chapman, J. R., Steele
Cook, O. W., Caruthersville
Cooke, Francis W., Caruthersville
Cooper, Lawrence E., 2105 Hanton, Ft. Myers, Fla.
Denton, Levi D., Hayti
Hensley, Daniel R., Wardell
Kaiser, Clarence D., Hayti
Lamb, Woodrow M., Caruthersville
Limbaugh, Walter R., Hayti
McCoy, Warren R., Caruthersville
McKaskle, Clarence W., Caruthersville
Morris, Clyde L., Caruthersville
Phipps, George W., Caruthersville
Ricketson, George M., Hayti
Shirey, Arnold G., Hayti
Taylor, Edward L., Steele
Turner, James H., Steele
Turner, William F., Steele
Walker, James W., P. O. Box 426, Tuckerman, Ark.

PERRY COUNTY MEDICAL SOCIETY

Bredall, Jerome J., Perryville
Carron, Oscar A., Perryville
DeGenova, G. H., Ste. Genevieve
Fairchild, James F., Perryville
Feltz, L. W., Perryville
Fischer, Theodore, Altenburg
Grayson, Richard R., Perryville
Legner, Stanley G., Perryville
Lutkewitte, Joseph F., Naval Ordnance Plant, Macon, Ga.
Miller, Oliver J., Route 1, Cape Girardeau
Quintana, Manuel M., Perryville
Riley, Fred P., Perryville
Utterman, William F., Perryville

PETTIS COUNTY MEDICAL SOCIETY
(Sedalia)

Beckemeyer, William A., 120 W. 5th St.
Bess, William E., 210½ S. Ohio St.
Boger, James W., 120 W. 5th St.
Brady, Charles H., 205 Ilgenfritz Bldg.
Campbell, Albert J., 312½ S. Ohio St.
Cannady, J. E., 312½ S. Ohio St.
Carlisle, John B., 314 S. Ohio St.
Dyer, David P., 301 Sedalia Trust Bldg.
Edwards, D. R., 107½ S. Ohio St.
Ewert, J. O., 412½ S. Ohio St.
Gonser, Karl B., 101 S. Ohio St.
Hite, Henry A., Green Ridge
Hopkins, Thomas J., Fifth & Ohio
Lamy, John E., 509 W. Broadway
Long, Frank B., 219½ S. Ohio St.
Lowe, Alvin L., 418½ S. Ohio St.
Maddox, Albert R., 116½ West Main St.
Murray, John W., Lincoln
Osborne, Charles D., 710 W. Broadway
Parkhurst, Charles L., Houstonia
Proctor, Donald C., 418½ S. Ohio St.
Rhodes, Euhlan L., 717 W. 6th St.
Rodeman, John M., 219½ S. Ohio St.
Siegel, Carl D., 1216 W. 18th St.
Siegel, Peter V., Smithton
Snavely, Edmund C., 500½ S. Ohio St.
Stauffacher, C. Gordon, 101½ S. Ohio St.
Trader, Charles B., 1717 W. 3rd St.
Walker, William E., La Monte
Walter, Archie L., 120 W. 5th St.

PHELPS COUNTY
(Mid-Missouri County Medical Society)

PIKE COUNTY MEDICAL SOCIETY

Andrae, Robert L., Louisiana
Barrymore, Eugene, Bowling Green
Biggs, James B., Bowling Green
Cunningham, Eric A., Louisiana
Hooker, John H., Clarksville
Johnson, Q. Ray, Jr., Louisiana
Lewellen, Charles H., Louisiana
Lewellen, Charles P., Louisiana
Middleton, John W., Louisiana
Scott, Clive D., Louisiana
Treadway, W. W., Silex
Wilcoxen, William B., Bowling Green

PLATTE COUNTY MEDICAL SOCIETY

Calvert, Lewis C., Weston
Durham, Silas L., Dearborn
Jennings, Ethlyn C., North Kansas City
Miller, Dean M., 6612 W. 61st St., Mission, Kansas
Mowry, Gerald L., Platte City
Robinson, John A., Edgerton

POLK COUNTY
(Dallas-Hickory-Polk County Medical Society)

PULASKI COUNTY
(Mid-Missouri County Medical Society)

PUTNAM COUNTY
(North Central Counties Medical Society)

RALLS COUNTY
(Marion-Ralls-Shelby County Medical Society)

RANDOLPH COUNTY
(Chariton-Macon-Monroe-Randolph County Medical Society)

RAY COUNTY
(Lafayette-Ray County Medical Society)

REYNOLDS COUNTY
(Mineral Area County Medical Society)

RIPLEY COUNTY
(Butler-Ripley-Wayne County Medical Society)

ST. CHARLES COUNTY
(Lincoln-St. Charles County Medical Society)

ST. CLAIR COUNTY
(West Central Missouri Medical Society)

ST. FRANCOIS COUNTY
(Mineral Area County Medical Society)

STE. GENEVIEVE COUNTY
(Mineral Area County Medical Society)

ST. LOUIS MEDICAL SOCIETY
(St. Louis)

Abell, Walter E., 2253 S. 39th St. (10)
Abrams, Morris, 4405 West Pine Blvd. (8)
Ackerman, Lauren V., 600 S. Kingshighway Blvd. (10)
Adler, Benard C., 500 N. Skinker Blvd. (5)
Agress, Harry, 1045 Missouri Theatre Bldg. (3)
Ahern, Archibald M., 3216 January Ave. (9)
Ahlering, George H., 207 Beaumont Medical Bldg. (8)
Aitken, Louis F., 502 Beaumont Medical Bldg. (8)
Albrecht, Franklin H., 505 University Club Bldg. (3)
Alden, Arthur M., 520 Frisco Bldg. (1)
Aldrich, James T., 2607a Franklin Ave. (6)
Alexander, Harry L., 4952 Maryland Ave. (8)
Alford, Leland B., 536 University Club Bldg. (3)
Allen, Duff S., 10 Oakleigh Lane (5)
Allen, Henry C., 212 Clayton Medical Bldg. (5)
Allen, Hollis N., 404 Missouri Theatre Bldg. (3)
Allen, Melvin A., 3701 Grandel Sq. (8)
Allen, Willard M., 630 S. Kingshighway Blvd. (10)
Allen, William E., Jr., 720 N. Sarah St. (8)
Altheide, J. Paul, 714 University Club Bldg. (3)
Alvis, Bennett Y., 903 Carleton Bldg. (1)
Alvis, Edmund B., 903 Carleton Bldg. (1)
Ambrose, Olney A., 932 Beach Ave. (12)
Anstey, George, 4660 Maryland Ave. (8)
Arneson, A. N., 457 N. Kingshighway Blvd. (8)
Arney, William G., 16 Hampton Village Plaza (9)
Arnold, Eugene L., 8700 Partridge Ave. (15)
Aronberg, Lawrence M., 4950 Lindell Blvd. (8)
Arzt, Franz, 420 Lido Dr., Fort Lauderdale, Fla.
AufderHeide, G. Russell, 4570 Fair Ave. (15)
Auner, Cecil R., 1515 Lafayette Ave. (4)
Austin, Martin G., 1515 Lafayette Ave. (4)
Ayars, Treston R., 817 University Club Bldg. (3)
Azar, Philip L., 435 Missouri Ave., East St. Louis, Ill.
Backer, Matt H., Jr., 9832 Ravensbrook Dr. (23)
Bailey, Drennan, Missouri Theatre Bldg. (3)
Bailey, Frank A., 3108 S. Grand Blvd. (18)
Bailey, Fred W., 1147 16th Ave., N., St. Petersburg, Fla. (6)
Baker, Cecil G., Idaho State Hosp., Blackfoot, Idaho
Baker, Cecil H., 3555 Sidney St. (4)
Baker, William M., 3133 Hawthorne Blvd. (4)
Balazs, Karl J., 3623 Cleveland Ave. (10)
Banet, Samuel R., 7301 St. Charles Rock Rd. (14)
Banton, William C., 11 N. Jefferson Ave. (3)
Bardenheier, J. Phil, 602 Wall Bldg. (8)
Barker, Jesse W., 1504 S. Jefferson Ave. (4)
Baron, William, 3601 S. Jefferson Ave. (18)
Barrett, Scott R., 1409 N. Euclid Ave. (13)
Bartels, Leo, 205 Frisco Bldg. (1)
Bartlett, Robert W., 929 University Club Bldg. (3)
Bartlett, Willard, 945 Missouri Theatre Bldg. (3)
Bartnick, Mitchel L., 3895 Holly Hills Blvd. (16)
Bassett, Robert B., 5427 Delmar Blvd. (12)
Bauer, John D., 2415 N. Kingshighway Blvd. (13)
Bauer, Louis, 2646 Gravois Ave. (18)
Bauer, Maria, 1935 Edison Ave., Granite City, Ill.
Bauer, Otto, 1935 Edison Ave., Granite City, Ill.
Baumgarten, Walter, Jr., 912 Beaumont Medical Bldg. (8)
Bawell, Malcolm B., 4660 Maryland Ave. (8)
Beare, J. Byron, 401 Beaumont Medical Bldg. (8)
Becke, William G., 912 Beaumont Medical Bldg. (8)
Becker, Bernard, 640 S. Kingshighway Blvd. (10)
Becker, Edward J., 205 Frisco Bldg. (1)
Becker, George H., 210 Lister Bldg. (8)
Beckette, Edmund S., 320 Lister Bldg. (8)
Behrens, Donald T., 42nd Medical Group, S.A.C., Loring A.F.B., Maine
Beisbarth, Albert, 403 South Side National Bank Bldg. (16)
Beisbarth, Carl C., 801 Beaumont Medical Bldg. (8)
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Benincasa, Anthony V., 3731 Goodfellow Blvd. (20)
Benjamin, Durand, 7430 Virginia Ave. (11)
Berard, Louis N., 984 Arcade Bldg. (1)
Bercu, Bernard, 600 S. Kingshighway Blvd. (10)
Berg, Ralph, 3203 S. Grand Blvd. (18)
Bergman, Hugo F., 203 Beaumont Medical Bldg. (8)
Bergner, Grace E., 114 N. Taylor Ave. (8)
Berland, Harry I., 996 Arcade Bldg. (1)
Berman, Joseph P., 1225 N. Grand Blvd. (6)
Berman, William, 101 Pasteur Medical Bldg. (8)
Bernard, Harvey R., 7826 Carlsbad Ave. (16)
Berry, John W., 7261 Lindell Blvd. (5)
Bersche, Bertram L., 5214 Pernod Ave. (9)
Bettonville, Paul J., Jr., 8634 Eulalie Ave. (17)
Bieri, Earl J., 633 Metropolitan Bldg. (3)
Bilsky, Nathan, 2739 N. Grand Blvd. (6)
Bindbeutel, Arthur H., 5203 Chippewa St. (9)
Bindbeutel, D. A., 1515 Lafayette Ave. (4)
Bircher, John L., 1325 S. Grand Blvd. (4)
Birdsall, Thomas C., 4660 Maryland Ave. (8)
Birenbaum, Aaron, 457 N. Kingshighway Blvd. (8)
Birsner, Louis J., 1232 Missouri Theatre Bldg. (3)
Bisno, Daniel, 101 S. Meramec Ave. (5)
Blache, J. Owen, 4924 Lotus Ave. (13)
Black, William D., 6655 Kingsbury Pl. (5)
Blair, Vilray P., Rte. No. 2, Box 195, Florissant.
Blair, Vilray P., Jr., 502 Beaumont Medical Bldg. (8)
Bleyer, Adrien, 819 University Club Bldg. (3)
Block, Arnold S., 1041 Missouri Theatre Bldg. (3)
Blount, Henry C., Jr., 510 S. Kingshighway Blvd. (10)
Bock, L. H., 1504 S. Grand Blvd. (4)
Bockelman, Clifford H., 2615 Brentwood Blvd. (17)
Boedeker, Roy V., 453 N. Taylor Ave. (8)
Boemer, L. C., 517 Beaumont Medical Bldg. (8)
Bohne, William R., 117 Lister Bldg. (8)
Bohrer, Harry C., 315 University Club Bldg. (3)
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Byrne, John E., 5878 Delor St. (9)
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Calodney, Martin M., 205 Lister Bldg. (8)
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Cassidy, Leslie D., 4952 Maryland Ave. (8)
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Chamness, James T., 929 University Club Bldg. (3)
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Clancy, James F., 424 University Club Bldg. (3)
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Cleary, Frank, 1935 Park Ave. (4)
Cleveland, Horace F., 1325 Somerset Pl., Long Beach, Calif. (7)
Clithero, W. Harvey, 906 Carleton Bldg. (1)
Coates, Thomas A., 1200 S. Big Bend Blvd. (17)
Coffin, Ernest L., Portage, Maine
Cohen, Benjamin H., 15 N. Brentwood Blvd. (5)
Cohen, Louis, 318 Lister Bldg. (8)
Collodi, George A., 3828 DeTonty St. (10)
Comens, Ruth C., 6150 Oakland Ave. (10)
Connor, John J., 433 Metropolitan Bldg. (3)
Conrad, Adolph H., 512 Beaumont Medical Bldg. (8)
Conrad, Adolph H., Jr., 512 Beaumont Medical Bldg. (8)
Conrad, Marshall B., 306 Beaumont Medical Bldg. (8)
Cook, Jerome E., 4409 West Pine Blvd. (8)
Cook, Ralph L., 423 Metropolitan Bldg. (3)
Cooper, Henry T., 1115 Paul Brown Bldg. (1)
Copher, Glover H., 602 S. Euclid Ave. (10)
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Correnti, Nicholas A., 453 N. Taylor Ave. (8)
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Costen, James B., 722 Beaumont Medical Bldg. (8)
Coughlin, Bertrand D., 333 Metropolitan Bldg. (3)
Crego, Clarence H., Jr., 1033 Missouri Theatre Bldg. (3)
Crossen, Robert J., 903 University Club Bldg. (3)
Crossman, Robert W., 514 University Club Bldg. (3)
Crowell, Hugh C., 9764 Tesson Ferry Rd. (23)
Culkin, Thomas R., 4100 Upton Ct. (16)
Cummings, James H., 424 N. Euclid Ave. (8)
Cutler, Harold M., 1018 Beaumont Medical Bldg. (8)
Czebrinski, Edward W., 3701 Grandel Sq. (8)
Daake, John W., 406 South Side National Bank Bldg. (16)
Dahms, Gustave, 1452 S. Grand Blvd. (4)
Dalton, Arthur R., 207 Lister Bldg. (8)
Daman, George A., 5203 Chippewa St. (9)
Dames, Richard J., 1515 Lafayette Ave. (4)
Danis, Peter G., 734 Missouri Theatre Bldg. (3)
Dankner, Arnold, 110 S. Central Ave. (5)
Davie, Joseph, 406 Frisco Bldg. (1)
Davies, Dean F., American Cancer Society, 521 W. 57th St., New York, N. Y.
Davis, Frank L., 620 University Club Bldg. (3)
Davis, Martin W., 408 Humboldt Medical Bldg. (3)
Davis, Myron W., 718 Beaumont Medical Bldg. (8)
Day, Anthony B., 411 Beaumont Medical Bldg. (8)
Day, Cameron B., 2415 N. Kingshighway Blvd. (13)
Deakin, Rogers, 723 University Club Bldg. (3)
Demko, Frank, 1321 S. Broadway (4)
Demko, William, 3450 Gravois Ave. (18)
Depew, Heber B., 1446 S. Grand Blvd. (4)
Deppe, Arthur H., 835 University Club Bldg. (3)
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DeWitt, Robert H., Florida Ave. at 10th St., Washington, D. C. (1)
Deyton, John W., 501 Bacon Ave. (19)
Diehr, Alvin H., 845 Missouri Theatre Bldg. (3)
DiLeo, Senatro W., 412 Humboldt Medical Bldg. (3)
Dmytryk, Eugene T., 518 University Club Bldg. (3)
Donahoe, James L., 3440th SU Army Hospital, Fort Benning, Ga.
Dorsett, E. Lee, 8505 Delmar Blvd. (24)
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Doyle, Charles R., 906 Missouri Theatre Bldg. (3)
Drace, Charles C., 3702 Gravois Ave. (16)
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Drake, Truman G., 114 N. Taylor Ave. (8)
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Drews, Leslie C., 516 Metropolitan Bldg. (3)
Drey, Norman W., 634 N. Grand Blvd. (3)
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Drum, Clarence G., 1927a N. Union Blvd. (13)
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Eberle, Vincent L., 4952 Maryland Ave. (8)
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Ecklund, Archibald M., U.S. Naval Training Center, San Diego, Calif. (33)
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Edwards, Joseph C., 1018 Beaumont Medical Bldg. (8)
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Egley, Loren E., 1116 Missouri Theatre Bldg. (3)
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Eidmann, Walter P., 3146 Morganford Rd. (16)
Eigel, Edwin G., 3211 S. Grand Blvd. (18)
Eimer, Charles E., 201 Pasteur Medical Bldg. (8)
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Farris, William W., 3505 N. Grand Blvd. (7)
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Feldman, David, 601 Humboldt Bldg. (3)
Feller, Harold H., 2739 N. Grand Blvd. (6)
Fellhauer, Carl M., 505 Humboldt Bldg. (3)
Ferguson, Thomas B., 600 S. Kingshighway Blvd. (10)
Fineberg, Maxwell, 301 University Club Bldg. (3)
Fingerhood, Marvin G., 4652 Maryland Ave. (8)
Finnegan, Frank R., 201 Humboldt Medical Bldg. (3)
Finnegan, Joseph V., 633 Metropolitan Bldg. (3)
Fischer, Erich, 10 Pasteur Medical Bldg. (8)
Fischer, Harry W., 515 Lake Ave. (19)
Fish, Virgil O., 1114 Missouri Theatre Bldg. (3)
Fisher, Arthur O., 816 Beaumont Medical Bldg. (8)
Fitzgerald, Leo P., 6677 Delmar Blvd. (5)
Flance, Israel J., 4652 Maryland Ave. (8)
Flavan, David B., 401 Humboldt Medical Bldg. (3)
Fleishman, Alfred, 311 Pasteur Medical Bldg. (8)
Fletcher, Paul F., 517 Missouri Theatre Bldg. (3)
Flotte, Bernard H., 2435 N. Grand Blvd. (6)
Flynn, Edward P., San Diego Naval Hospital, San Diego, Calif.
Flynn, John T., 1715 S. 39th St. (10)
Flynn, Joseph E., 1617 S. Brentwood Blvd. (17)
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Ford, Lee T., Jr., 4952 Maryland Ave. (8)
Forsen, James A., 401 Wall Bldg. (8)
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Forster, Armand C., 1504 S. Grand Blvd. (4)
Forti, John J., 4703 Carter Ave. (15)
Foster, Howard M., 2025 North & South Rd. (14)
Foster, Leon, 727 Missouri Theatre Bldg. (3)
Fox, Robert E., 301 Humboldt Medical Bldg. (3)
Frank, Adolph M., 3701 Grandel Sq. (8)
Franklin, Max S., 727 Missouri Theatre Bldg. (3)
Frazier, Donald B., 3714 Washington Blvd. (8)
Freedman, Harold, 717 University Club Bldg. (3)
Freedman, Ruth S., 607 N. Grand Blvd. (3)
Freeman, David M., 7316 Kingsbury Ave. (5)
Freimuth, Louis E., 217 University Club Bldg. (3)
Frerking, Herbert W., 5535 Delmar Blvd. (12)
Freund, Newton M., 1119 Surry Hill Dr. (17)
Freund, Samuel J., 4409 West Pine Blvd. (8)
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Fries, Armand D., 974 Arcade Bldg. (1)
Fries, John W., Address Unknown
Fries, William A., 3840a Fillmore Ave. (16)
Friskel, Arthur K., 7422 Devonshire Ave. (19)
Fritschel, G. C., 3306 S. 13th St. (18)
Fryer, Minot P., 400 Metropolitan Bldg. (3)
Funsch, Edwin C., 614 Beaumont Medical Bldg. (8)
Funsch, Robert E., 894 Alanson Dr. (24)
Furla, Gus J., 9011 Cardinal Terrace (17)
Furlow, Leonard T., 530 Beaumont Medical Bldg. (8)
Gafney, George T., 1232 Missouri Theatre Bldg. (3)
Gaines, John F., R. 3, Box 392, Oklahoma City, Okla.
Gale, Philip R., 125 Orchard Ave. (19)
Gallagher, John F., 313 Wall Bldg. (8)
Gallagher, William J., 7214 Greenway Ave. (5)
Gansloser, Maximilian W., 3624 Arsenal St. (16)
Gansloser, Wilbert M., 6376 Clayton Rd. (17)
Garfinkel, Bernard T., 457 N. Kingshighway Blvd. (8)
Gay, Lee Pettit, Osage City
Gerst, Aloysius C., 8833 Partridge Ave. (15)
Gerwitz, Bernard W., 16 Hampton Village Plaza (9)
Gibson, Helen F., 903 Carleton Bldg. (1)
Gildea, Edwin F., 640 S. Kingshighway Blvd. (10)
Gildea, Margaret C. L., 4500 West Pine Blvd. (8)
Gillespie, William J., 7522 Harter Ave. (17)
Gissy, Carl J., 617 Metropolitan Bldg. (3)
Glaser, Martin J., 420 Mississippi Valley Trust Bldg. (1)
Glassberg, Bertrand Y., 212 Lister Bldg. (8)
Glennon, William P., 634 University Club Bldg. (3)
Glick, Harry N., 1504 S. Grand Blvd. (4)
Gnade, Albert J., 3606 Gravois Ave. (16)
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Gorla, Wayne O., 202 Lindell Trust Bldg. (6)
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Graham, Evarts A., 602 S. Euclid Ave. (10)
Graneto, Joseph A., 5521 S. Broadway (11)
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Graul, Elmer G., 2838 S. Grand Blvd. (18)
Graul, Walter P., Beaumont Medical Bldg. (8)
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Greditzer, Arthur S., 4500 West Pine Blvd. (8)
Greiner, Theodore, 7507 Washington Ave. (5)
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Grybinas, Vytautas J., 1901 Madison Ave. (6)
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Haffner, Heinz, 816 Beaumont Medical Bldg. (8)
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Hamilton, William P., 24 Gast Pl. (15)
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Hampton, Stanley F., 1018 Beaumont Medical Bldg. (8)
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Hanna, Richard E., 553 Delmar Blvd. (12)
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Harris, Solon P., 6826 Natural Bridge Ave. (20)
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Hartmann, Alexis F., 500 S. Kingshighway Blvd. (10)
Hartnett, Dalton C., 422 Missouri Theatre Bldg. (3)
Hartnett, Leo J., 422 Missouri Theatre Bldg. (3)
Hartwig, John A., 2807 N. Grand Blvd. (7)
Haskins, Arthur L., 630 S. Kingshighway Blvd. (10)
Hassett, Henry A., 618 University Club Bldg. (3)
Hawk, Bray O., 4660 Maryland Ave. (8)
Hawker, William D., 16 Hampton Village Plaza (9)
Hawkins, George L., Jr., 625 University Club Bldg. (3)
Hayden, Loyola F., 730 Hodiamont Ave. (12)
Haynes, Pugh, Jr., 203 Beaumont Medical Bldg. (8)
Heideman, Alvah G., 723 Metropolitan Bldg. (3)
Heifetz, Carl J., 457 N. Kingshighway Blvd. (8)
Heinbecker, Peter, 600 S. Kingshighway Blvd. (10)
Heinemann, Sol, 306 Humboldt Medical Bldg. (3)
Helbing, Harry H., 7546 Ethel Ave. (17)
Henderlite, John W., 408 Lister Bldg. (8)
Henke, Charles F., 3109 S. Grand Blvd. (18)
Hennelly, John J., 16 Hampton Village Plaza (9)
Hennerich, Walter E., 5670 Arsenal St. (9)
Henschel, Eugene V., 6200 Hoffman Ave. (9)
Herman, Morris, 3701 Grandel Sq. (8)
Herrick, Harold C., 5747 Bartmer Ave. (12)
Heusler, Anton F., 5400 Arsenal St. (9)
Hewitt, Walter R., 7649 Delmar Blvd. (5)
Heyer, Oscar C., 8015 S. Broadway (11)
Hickey, Robert F., 916 Missouri Theatre Bldg. (3)
Hickman, Eugene A., 2601 N. Whittier St. (13)
Hildreth, H. Rommel, 1030 Beaumont Medical Bldg. (8)
Hill, Roland, 5147 Waterman Ave. (8)
Hines, Arthur A., 10695 Bellefontaine Rd. (15)
Hobart, Carl, 3601a Gravois Ave. (16)
Hoefer, Walter H. V., 3108 S. Grand Blvd. (18)
Hoffmann, A. David, 6222 Delor St. (9)
Hoffmann, Ronald E., Address Unknown
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Hofstatter, Lilli, 10053 Lakeside Dr. (23)
Holbrook, Charles K., 9901 Diamond Dr. (15)
Holdenried, William E., 4131 Tholozan Ave. (16)
Hollo, Vencel W., 4960 Laclede Ave. (8)
Holt, Earl P., Jr., 5444 Clemens Ave. (12)
Homan, Joseph S., 4903 Delmar Blvd. (8)
Honich, Nicholas J., 8902 Riverview Blvd. (21)
Hopkins, Thomas A., 4411 Forest Park Ave. (8)
Horner, John L., 114 N. Taylor Ave. (8)
Horwitz, Irwin B., 504 Metropolitan Bldg. (3)
Hosto, Leland E., 4909 Lindenwood Ave. (9)
Houston, Vincent T., 106 S. Central Ave. (5)
Hrdlicka, Victor E., 1020 Missouri Theatre Bldg. (3)
Huber, Erwin T., 913 Missouri Theatre Bldg. (3)
Huckstep, Robert A., 43 Pine St., Farmington
Huggins, Albert M., 734 Missouri Theatre Bldg. (3)
Hulbert, Bernard, 16 Pasteur Medical Bldg. (8)
Hummel, Anton J., 416 Metropolitan Bldg. (3)
Humphrey, Harvey A., 510 S. Kingshighway Blvd. (10)
Hunter, Charles H., 4048a Labadie Ave. (7)
Hutchinson, James H., Jr., 114 N. Taylor Ave. (8)
Hutto, A. Herman, 105 Lister Bldg. (8)
Hutton, Joseph Lewis, 902 South Side National Bank Bldg. (16)
Hyman, Anna, 5400 Arsenal St. (9)
Hyndman, Charles E., 714 Beaumont Medical Bldg. (8)
Inkley, John J., 5203 Chippewa St. (9)
Israel, Milton R., 8230 Forsyth Blvd. (24)
Ittner, George W., Jr., 901 Beaumont Medical Bldg. (8)
Izmirlian, Grant, 6150 Oakland Ave. (10)
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Jacobson, Donald J., Address Unknown
James, Norman A., 9903 Diamond Dr. (15)
James, William M., 1030 Beaumont Medical Bldg. (8)
Janney, James G., Jr., 35 N. Central Ave. (5)
Janzen, Erwin M., 915 N. Grand Blvd. (6)
Jaudon, Joseph C., 46 Glen Rd. (19)
Javaux, Everett J., 405 University Club Bldg. (3)
Jean, J. Ted, 4500 West Pine Blvd. (8)
Jensen, J. Ernest, 1140 Missouri Theatre Bldg. (3)
Jim, Robert T. S., 600 S. Kingshighway Blvd. (10)
Johnson, Charles H., 4148 Federer Pl. (16)
Johnson, Mitchell D., 40 N. Florissant Rd. (21)
Johnstone, John, Jr., 1011 Beaumont Medical Bldg. (8)
Jonas, Harry W., Jr., 5535 Delmar Blvd. (12)
Jones, Andrew B., 322 Beaumont Medical Bldg. (8)
Jones, Augustin, 543 Missouri Theatre Bldg. (3)
Jones, Grey, 215 Lister Bldg. (8)
Jones, Otey S., 3616 S. Broadway (18)
Jones, Richard A., 332 Calvert Ave. (19)
Jones, Vincent L., 645 Missouri Theatre Bldg. (3)
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Jordan, Edward J., 1504 S. Grand Blvd. (4)
Jordan, Walter R., 503 Wall Bldg. (8)
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Jungk, Carl G. W., 2278 S. Jefferson Ave. (4)
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Kane, Clyde E., 706 Walton Ave. (8)
Kane, R. Emmet, 1117 N. Grand Blvd. (6)
Kaplan, Albert, 726 Country Club Dr. (21)
Kappesser, Netajean Broome, 7044 Lindell Blvd. (5)
Kappesser, Roland C., 7044 Lindell Blvd. (5)
Karandjeff, A. D., 811 Metropolitan Bldg. (3)
Karl, Michael M., 4652 Maryland Ave. (8)
Kaskie, Clifford R., 35 N. Central Ave. (5)
Katz, Samuel D., 825 Midland Ave. (5)
Keating, John U., Anclote Manor, Tarpon Springs, Fla.
Keeble, Charles B., 3102 S. Grand Blvd. (18)
Keffler, Karl L., 1139 Bellevue Ave. (17)
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Keim, John P., 2730 McNair Ave. (18)
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Keller, Maurice J., 3701 Grandel Sq. (8)
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Kelley, Robert W., 622 Beaumont Medical Bldg. (8)
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Kelly, R. Emmet, 6335 Waterman Ave. (5)
Kenamore, Bruce, 457 N. Kingshighway Blvd. (8)
Kennedy, Francis L., 1001 Missouri Theatre Bldg. (3)
Kerr, David N., 217 Lister Bldg. (8)
Kettelkamp, George D., 4931 Potomac St. (9)
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Keyes, E. Lawrence, 4952 Maryland Ave. (8)
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Kieffer, Victor B., Jr., 400 Lister Bldg. (8)
Kienzle, Edward C., 4075 S. Grand Blvd. (11)
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King, John V., 689 E. Big Bend Blvd. (19)
King, Samuel J., 800 Carleton Bldg. (1)
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Kinsella, Dalton L., Jr., Jackson Memorial Hospital, Miami, Fla.
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Kinsella, Ralph A., Jr., 9084 West Swan Circle (17)
Kirchner, Walter C. G., 7452 Wise Ave. (17)
Kirstein, Melvin B., 209 University Club Bldg. (3)
Kirtz, Louis P., 4952 Maryland Ave. (8)
Kistner, William F., 603 Metropolitan Bldg. (3)
Klaff, Daniel D., 309 Beaumont Medical Bldg. (8)
Klein, Andrew G., 2959 Milton Blvd. (4)
Klein, Arnold G., 2632 S. Kingshighway Blvd. (9)
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Klein, Bert H., 2632 S. Kingshighway Blvd. (9)
Klein, Harry A., 5074 N. Union Blvd. (15)
Kleinschmidt, Clinton, 827 Metropolitan Bldg. (3)
Klemme, Roland M., 4952 Maryland Ave. (8)
Klenk, Charles L., 420 Metropolitan Bldg. (3)
Klippel, Bernhardt W., 3701 Grandel Sq. (8)
Klym, Nicholas, 3626 N. 11th St. (7)
Kneal, Ellsworth, 921 Missouri Theatre Bldg. (3)
Knese, Luke A., 1506 Hodiamont Ave. (12)
Knight, Franklin P., 9746 Colony Dr. (15)
Knight, William A., 8201 N. Broadway (15)
Knight, William A., Jr., 4161 Lindell Blvd. (8)
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Koenig, George H., 5135 31st Ave., S., St. Petersburg, Fla. (1)
Koenig, Karl F., 502 Beaumont Medical Bldg. (8)
Kohler, Eugene J., 4968a Delmar Blvd. (8)
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Koon, Bernard T., 4755a Morganford Rd. (16)
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Korn, Robert L., 8230 Forsyth Blvd. (24)
Kotkis, Alexander J., 80 York Dr. (17)
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Kouri, Martin F., 3705 Washington Ave. (8)
Koutsoumpas, William V., 1405 S. Broadway (4)
Kowert, Edward H., 105 Beaumont Medical Bldg. (8)
Kraft, Edward O., 2019 St. Clair Ave. (17)
Kramer, Fred, 4161 Lindell Blvd. (8)
Kramolowsky, H. H., 986 Arcade Bldg. (1)
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Krause, G. Lynn, 614 Beaumont Medical Bldg. (8)
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Krebs, Otto S., 207 Beaumont Medical Bldg. (8)
Kromer, Charles, 6606 Oleatha Ave. (9)
Kubitschek, Paul F., 207 Beaumont Medical Bldg. (8)
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Ladd, Charles B., 7430 Virginia (11)
LaDriere, Raymond J., 35 N. Central Ave. (5)
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Lamb, Wanda, 4500 West Pine Blvd. (8)
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Lampe, Elfred H., 630 S. Kingshighway Blvd. (10)
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Lane, Clinton W., 440 Beaumont Medical Bldg. (8)
Langan, William J., Jr., 5803 Plymouth Ave. (12)
Lange, Adolph C., 512 Wall Bldg. (8)
Lanier, Earl W., 3731 Goodfellow Ave. (20)
Lansche, Elmer A., 6303 Natural Bridge Ave. (20)
Larimore, Joseph W., 626 Beaumont Medical Bldg. (8)
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Lassar, Gilbert N., 1307 Washington Ave. (3)
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Lawrence, John V., 4534 West Pine Blvd. (8)
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Lawton, Lawrence W., 2801 N. Taylor Ave. (15)
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Lenobel, Milton I., 504 Metropolitan Bldg. (3)
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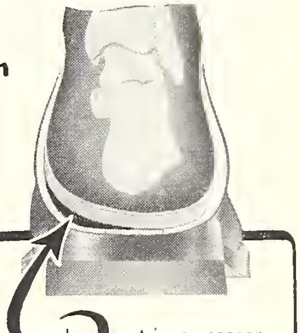

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McAfee, C. Alan, 457 N. Kingshighway Blvd. (8)
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McCarthy, Eugene F., 5070 Westminster Pl. (8)
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McCloskey, R. Bruce, 745 E. Big Bend Rd. (19)
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McDowell, Frank, 400 Metropolitan Bldg. (3)
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McSwiney, John G., 5014 Thekla Ave. (15)
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MacBryde, Cyril M., 429 Missouri Theatre Bldg. (3)
Macdonald, William C., 201 Humboldt Bldg. (3)
Mack, Robert E., Walter Reed Army Hospital, Washington, D. C.
Mackey, John F., Jr., 228 Beaumont Medical Bldg. (8)
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Magallon, Robert A., Naval Ordnance Plant, Louisville, Ky.
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Malles, A. Conrad, 819 University Club Bldg. (3)
Manion, Peter J., 3915 Brannon Ave. (9)
Mannis, Ben G., 846 N. McKnight Rd. (24)
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Manting, George, 211 Roosevelt Hotel Bldg. (8)
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Martin, Thomas M., 745 Missouri Theatre Bldg. (3)
Mason, Roy E., 410 Frisco Bldg. (1)
Massie, Edward, 457 N. Kingshighway Blvd. (8)
Masters, William H., 630 S. Kingshighway Blvd. (10)
Mastin, E. Vernon, 930 Beaumont Medical Bldg. (8)
Mathae, George H., 3167 S. Grand Blvd. (18)
Mathes, Sydney B., 4652 Maryland Ave. (8)
Matthews, John G., 3707 Watson Rd. (9)
Mattis, Robert D., 1119 Missouri Theatre Bldg. (3)
Maughs, Sydney B., 4500 West Pine Blvd. (8)
Max, C. O. C., 701 Beaumont Medical Bldg. (8)
Max, Paul F., 701 Beaumont Medical Bldg. (8)
Maze, Lawrence E., 630 S. Kingshighway Blvd. (10)
Medler, Francis J., 4118 West Florissant Ave. (15)
Mehan, George T., 417 Wall Bldg. (8)
Meinberg, William H., Jr., 320 Frisco Bldg. (1)
Meiners, Edwin P., 6651 Enright Ave. (5)
Meiners, Theodore M., 922 Newport Ave. (19)
Meisenbach, A. Edward, 410 Wall Bldg. (8)
Melick, William F., 306 Humboldt Medical Bldg. (3)
Mellies, Eugene G., 7518 Forest View Dr. (21)
Mellies, George A., 2917 St. Louis Ave. (6)
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Merklin, Anton L., 3507 Potomac St. (18)
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Meyer, Herman M., 4409 West Pine Blvd. (8)
Meyer, Oscar D., 6029 S. Kingshighway Blvd. (9)
Meyerhardt, Milton H., 4409 West Pine Blvd. (8)
Meyers, John B., 3903 Olive St. (8)
Meyers, Montague M., Address Unknown
Mezera, Raymond A., 201 Humboldt Medical Bldg. (3)
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Michaelree, John F., 2816 Sutton Ave. (17)
Middleman, Isadore C., 211 Pasteur Medical Bldg. (8)
Mier, Thomas M., 703 University Club Bldg. (3)
Milder, Benjamin, 501 Humboldt Medical Bldg. (3)
Miller, Charles W., 408 Humboldt Medical Bldg. (3)
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Miller, Perry B., Harper Hosp., Detroit, Mich. (1)
Millikin, L. A., 2608 S. Kingshighway Blvd. (9)
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Mistachkin, Norman L., 300 Wall Bldg. (8)
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Moore, Carl V., 600 S. Kingshighway Blvd. (10)
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Mudd, James L., 437 Missouri Theatre Bldg. (3)
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Mueller, Joseph A., 3177 S. Grand Blvd. (18)
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Mueller, W. K., 601 University Club Bldg. (3)
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Neilson, Charles H., 6319 Alexander Dr. (5)
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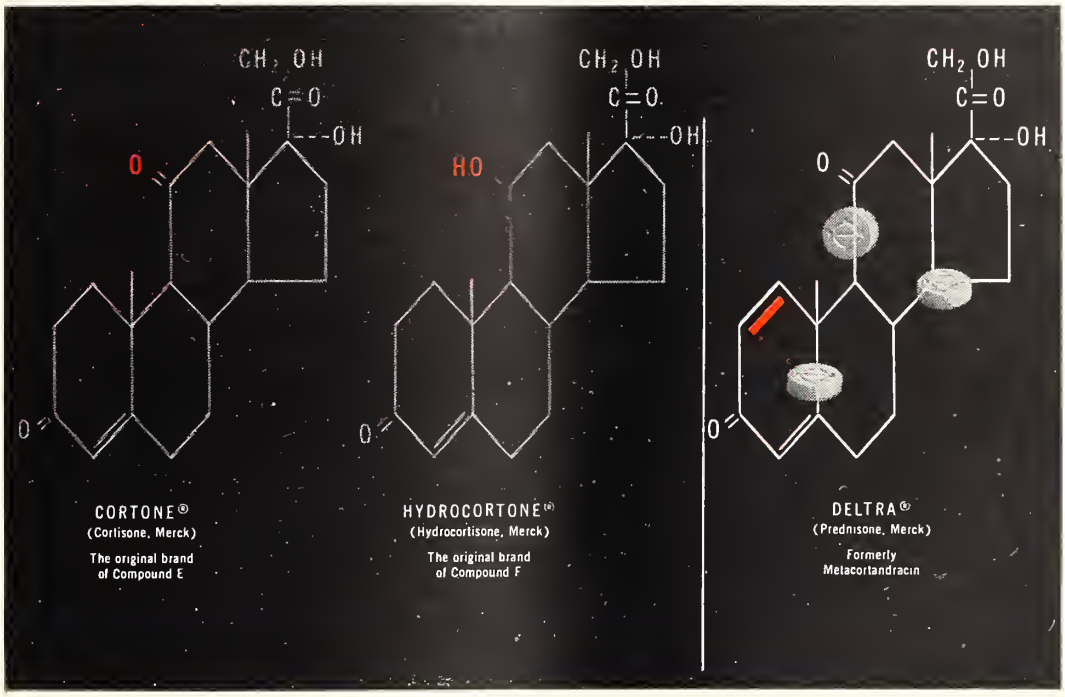

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Pranger, Sylvester H., 4952 Maryland Ave. (8)
Presnell, Cleitus A., 630 Missouri Theatre Bldg. (3)
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Proetz, Arthur W., 1002 Beaumont Medical Bldg. (8)
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Pruett, Hubert S., 2739 N. Grand Blvd. (6)
Puckett, Cordelia, 69 Crestwood Dr. (5)
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Pyne, Herbert S., 2752a Cherokee St. (18)
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Richman, Elmer, 8230 Forsyth Blvd. (24)
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Riley, Ralph D., 1134 Missouri Theatre Bldg. (3)
Riley, William H., 4660 Maryland Ave. (8)
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Riordan, Laurence M., 320 Lister Bldg. (8)
Ritchie, Frances R., 5233 Waterman Ave. (8)
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Robertson, LeRoy L., 340 Beaumont Medical Bldg. (8)
Robins, Eli, 600 S. Kingshighway Blvd. (10)
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Roe, Allen N., Address Unknown
Rohlfing, Walter H., 4724 Gravois Ave. (16)
Romendick, Samuel S., 107 Lutes Circle, Van Horne Park, Fort Bliss, Texas
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Rosen, Charles S., 412 Humboldt Medical Bldg. (3)
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Rothweiler, Robert J., 4161 Lindell Blvd. (8)
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Roy, Joseph A., 912 Beaumont Medical Bldg. (8)
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Sauer, Dean, 106 S. Central Ave. (5)
Sauer, W. Nicholas, 218 Beaumont Medical Bldg. (8)
Sauer, William E., 218 Beaumont Medical Bldg. (8)
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Schlenker, Lawrence, 3515 S. Grand Blvd. (18)
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Seib, George A., 2323 Lafayette Ave. (4)
Senturia, Ben H., 500 N. Skinker Blvd. (5)
Senturia, Hyman R., 122 Pasteur Medical Bldg. (8)
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Sertl, John D., 3739 Gravois (16)
Sevin, Omar R., 4952 Maryland Ave. (8)
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Sexton, Daniel L., 937 University Club Bldg. (3)
Sexton, Elmer E., 909 Arcade Bldg. (1)
Shackelford, Horace H., 504 Wall Bldg. (8)
Shade, Virgil E., 4145 S. Grand Blvd. (18)
Shahan, William E., 524 Metropolitan Bldg. (3)
Shahan, Philip T., 524 Metropolitan Bldg. (3)
Shaner, John F., 912 Beaumont Medical Bldg. (8)
Shapleigh, John B., 1018 Beaumont Medical Bldg. (8)
Sharp, Austin R., 6000 West Florissant Ave. (20)
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Sheets, Martin E., 4329 Manchester Ave. (10)
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Summers, Thomas F., 8200 Airport Rd. (21)
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Titterington, Paul F., 211 Metropolitan Bldg. (3)
Tjoflat, Oliver E., 4224 N. Grand Blvd. (7)
Tobias, Norman, 700 S. Meramec Ave. (5)
Todd, D. Clay, 4140 Forest Park Ave. (8)
Toms, Stephen, c/o Dr. Sinan, 2228 Taylor St., N.E., Washington, D. C. (13)
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Torin, Bernice A., 310 Pasteur Medical Bldg. (8)
Tremain, I. G., 4254 Flora Blvd. (10)
Trigg, Joseph F., 233 Metropolitan Bldg. (3)
Tripodi, Anthony M., 3806 N. 12th St., Tacoma, Wash.
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Trunko, Leo, 1900 Telegraph Rd. (23)
Turner, Rush, 1251 Blackstone Ave. (12)
Twedell, Donald L., 4143a N. Newstead Ave. (15)
Uhlemeyer, Henry A., 4362 Warne Ave. (7)
Uhlemeyer, Henry A., Jr., 5203 Chippewa St. (9)
Unterberg, Hillel, 325 Frisco Bldg. (1)
Vandover, John T., 3503 Crittenden St. (18)
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Vatterott, Paul B., 10300 St. Charles Rock Rd. (14)
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Vaughn, A. N., 11 N. Jefferson Ave. (3)
Venable, Howard P., 11 N. Jefferson Ave. (3)
Verda, Dominic J., 400 Lister Bldg. (8)
Vermillion, Crofford O., 600 S. Kingshighway Blvd. (10)
Vest, James C., 906 Missouri Theatre Bldg. (3)
Vezeau, Stephen, 1504 S. Grand Blvd. (4)
Virant, John A., 2 Picardy Lane (5)
Vitt, Alvin E., 4161 Lindell Blvd. (8)
Vitt, Edwin F., 16 Hampton Village Plaza (9)
Viviano, Joseph G., 16 Hampton Village Plaza (9)
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Vohs, Carl F., 610 Metropolitan Bldg. (3)
Von Kaenel, Joseph E., 551 Barnes Rd. (5)
Vournas, Christopher G., 201 Humboldt Medical Bldg. (3)
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Wall, Emmett D., 5823 Neosho St. (9)
Wallace, M. Marvin, U.S.P.H.S. Hosp., Windmill Pt., Detroit, Mich. (15)
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Walters, Harold E., 720 Metropolitan Bldg. (3)
Walters, William H., 3608 S. Grand Blvd. (18)
Walton, Franklin E., 602 S. Euclid Ave. (10)
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Warner, Robert G., 1115 Paul Brown Bldg. (1)
Wasserman, Helman C., 108 Lister Bldg. (8)
Waters, Hugh R., 457 N. Kingshighway Blvd. (8)

Wattenberg, Carl A., 49 Kingsbury Pl. (12)
Wayland, Thomas A., 5540 Grant Pl. (16)
Webb, Lewis M., 4501a Manchester Ave. (10)
Webb, Marion A., 221 Lister Bldg. (8)
Webb, Paul B., 1915a Sidney St. (4)
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Webb, Paul K., 1508 Chemical Bldg. (1)
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Wegner, Carl R., 630 S. Kingshighway Blvd. (10)
Weiler, Thomas J., 504 Missouri Theatre Bldg. (3)
Weinel, Francis G., 5205 Chippewa St. (9)
Weinhaus. Robert S., 507 Metropolitan Bldg. (3)
Weinsberg, William C., 3606 Gravois Ave. (16)
Weintraub, Solomon A., 208 Lister Bldg. (8)
Weir, Don C., 606 Missouri Theatre Bldg. (3)
Weir, Royal A., 206 Pasteur Medical Bldg. (8)
Weis, Matthew W., 437 Missouri Theatre Bldg. (3)
Weiss, Richard S., 940 Beaumont Medical Bldg. (8)
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Welch, Hooper W., 630 Missouri Theatre Bldg. (3)
Welsh, Laurence C., 315 Chouteau Bldg. (10)
Wennerman, Sam F., 1045 Missouri Theatre Bldg. (3)
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Westphaelinger, Henry F., 10019 Grosevenor (15)
Weyerich, Leon F., 8321 N. Broadway (15)
Wheat, Myron W., Jr., 600 S. Kingshighway Blvd. (10)
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White, T. Wistar, 220 Lister Bldg. (8)
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White, W. H., Jr., 110 S. Central Ave. (5)
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Wild, Aloysius A., 3901 West Florissant Ave. (7)
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Will, Leo A., 611 Humboldt Medical Bldg. (3)
Williams, Edward B., Jr., 4242 Easton Ave. (13)
Williams, Ray D., 114 N. Taylor Ave. (8)
Williamson, Walter E., 233 Frisco Bldg. (1)
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Wilson, Keith S., 4952 Maryland Ave. (8)
Wilson, Kenneth O., 1259 N. Kingshighway Blvd. (13)
Wilucki, Leo E., 5402a Gravois Ave. (16)
Wilucki, Melvin R., 5402a Gravois Ave. (16)
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Zeitler, William T., 3102 S. Grand Blvd. (18)
Zentay, Paul J., 8515 Delmar Blvd. (24)
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Fingert, H. H., 4952 Maryland Ave.
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Finley, Freeman L., 9416 Lackland Rd., Overland
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Fleming, Robert J., 35 N. Central, Clayton
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Foster, Robert L., 5641 Sutherland Ave.
Fox, Leon J., 420 Missouri Theatre Bldg.
Franklin, Harold A., 7824 Stanford Ave.
Freiheit, Harold J., 3941 Holly Hills Blvd.
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Schultz, Samual, 2813 Watson Rd.
Schuman, Stanley H., 8505 Delmar Blvd.
Schwartz, Melvin M., 4652 Maryland Ave.
Schwartzman, Bernard, 4652 Maryland Ave.
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Skinner, John S., 31 Willow Hill Rd.
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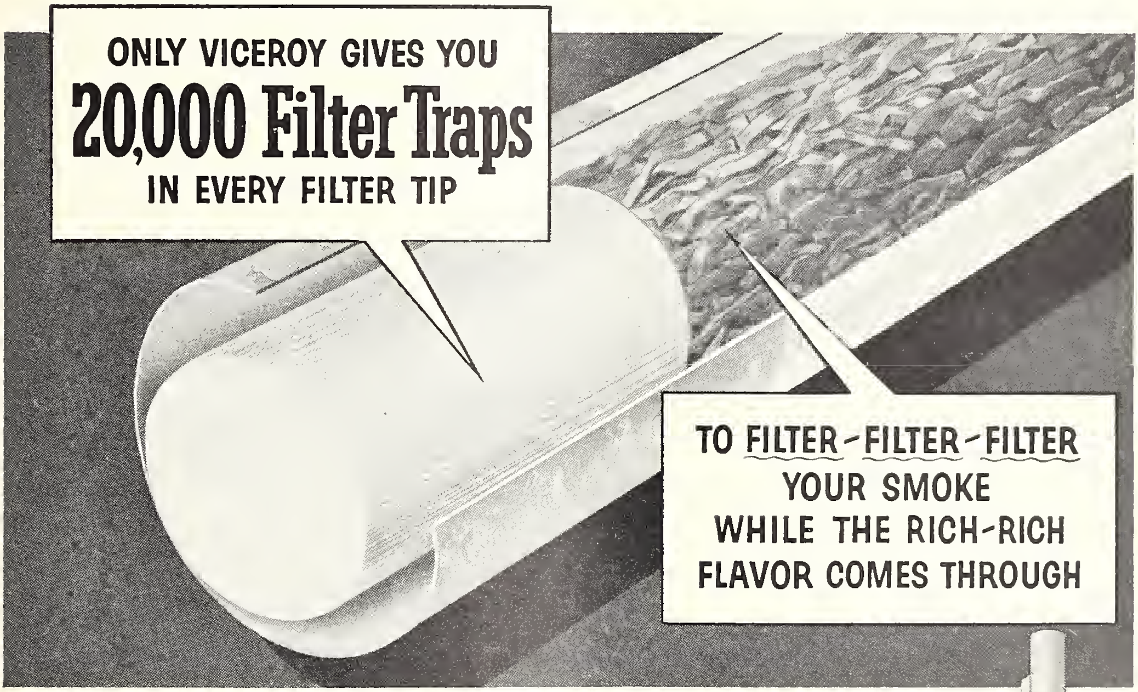
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Curiosa et Trivia

William B. McCunniff, M.D.

Count your blessings: the incisor teeth of the pocket gopher grow at the rate of 46 inches a year . . . but his gnawing keeps them trimmed down to acceptable limits.

For a problem in fluid and electrolyte balance, reflect on the fact that the gazelle and the llama (of which you probably treat few) do not drink water.

Over 80 per cent of the violent crimes committed by women in the United States occur just before or during a menstrual period.

The oldest known picture of a doctor was drawn on the wall of a cave in the French Pyrenees about 20,000 years ago.

Co-pilot on the first crossing of the English Channel in a balloon was a physician, John Jeffries.

"The Vain to the Foolish" was inscribed on the front of an insane asylum built by Dom Pedro, II, Emperor of Brazil. The phrase stemmed from the fact that the hospital was built with funds collected from the sale of titles of nobility . . . at a going rate of $10,000 each.

Soon after the opening of the Pennsylvania Hospital in 1752, the Board of Managers, aware of the "entertainment" value of their psychiatric patients, fenced off an area and charged four pence admission for the public to watch the behavior of the mentally ill. Under the leadership of Benjamin Rush, a member of the original medical staff, this was a short lived venture.

"Pharmacy in 1957" published about fifty years ago by Harry B. Mason, made the shocking prediction that there would be "prescriptionists who do nothing but fill prescriptions" and "corporations owning five or ten or fifteen stores."

Re the steel-worker's question: nothing will happen . . . the nail is non-magnetic.

A weight gain of 950,000 per cent is average for silkworms. At hatching, 700,000 of them weigh one pound; in six weeks their total weight will be 9,500 pounds.

The Qurungua Indians, about 40,000 in number, are said to have never uttered a word. Reportedly, this Bolivian tribe has a uniform congenital abnormality of the vocal apparatus which makes speech impossible.

Capsule Clinics

Irving A. Wien, M.D.

- It has been estimated that there are 250,000 persons with multiple sclerosis in the United States alone. Its cause and cure remain unknown. Solomon, W. M.: J.A.M.A. **156** (Oct. 23) 1954.
- It is apparent that the difficulty in arriving at a single effective type of treatment for pancreatitis in its various forms is the uncertainty regarding the etiologic basis of this disease. MacKenzie, W. C.: Bull. Am. Coll. Surg. **40** (Jan.-Feb.) 1955.
- When one ovary was found grossly malignant at operation and the other appeared grossly benign, in 17.5 per cent the benign appearing ovary proved to be malignant when examined histologically. This emphasizes the importance of removing both ovaries. Te Linde, R. W.: Operative Gynecology, J. P. Lippincott Co., Philadelphia, 1946.
- The treatment of cancer of the thyroid is primarily surgical. Irradiation is of secondary importance, being used, for the most part, in cases in which not all malignant tissue can be resected. Pemberton, J. J., and Black, B. M.: Cancer of the Thyroid, American Cancer Society, Inc., 1954.
- Even patients with minor burns require supplementary protein if they have lesions of the lower extremities which necessitate prolonged bed rest, since patients afebrile on normal diets on more than ten days bed rest go into protein imbalance. Blocker, T. G.: Kansas City M. J. **31** (March) 1955.
- Our population growth in the United States in recent years resulted largely from an excess of birth over death, in 1954 this was 2,600,000. Stat. Bull. Metropolitan Life Insurance Co. **35** (December) 1954.

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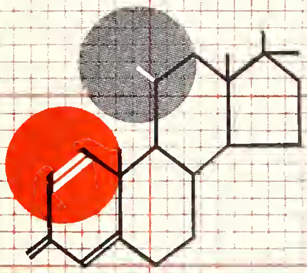

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Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

On April 29 and 30 the new buildings of the Washington University Medical School in St. Louis were dedicated. The visiting delegates were then presented to the Chancellor and President of the Corporation, Mr. Robert S. Brookings. Harvard University, President Abbott Lawrence Lowell; Yale University, Dean George Blumer; University of Pennsylvania, Dean William Pepper; Brown University, Mr. Augustus Levi Abbott; University of Pittsburgh, Dean Thomas Shaw Arbuthnot; St. Louis University, Dean Hanau Wolf Loeb; Medical Corps of the United States Army, Captain Thomas Dupuy Woodson; Western Reserve University, Dean Carl August Hamann; Lafayette College, President John Henry MacCracken; Tulane University of Louisiana, Prof. Rudolph Matas; St. Louis Medical Society, Dr. Robert Emmet Kane; Knox College, President MacClelland; University of Michigan, Professor Frederick George Novy; University of Missouri, Acting-Dean Guy Lincoln Noyes; University and Bellevue Hospital Medical College, Vice-Dean Samuel Albertus Brown; New York Academy of Medicine, Dr. Edward Dix Fisher; Missouri State Medical Association, Dr. Frank Joseph Lutz; The University of Edinburgh, Prof. Lindsay Stephan Milne, University of Kansas; Central Wesleyan College, President Otto Edward Kriege, Prof. Albert William Ebeling; Detroit College of Medicine and Surgery, Dean B. R. Shurley, Prof. Charles Godwin Jennings; University of Kansas, Prof. John Sundwall; Rockefeller Institute for Medical Research, Dr. Simon Flexner; Memorial Institute for Infectious Diseases and Rush Medical College, Dr. James Bryan Herrick; American College of Surgeons, Dr. Major Gabriel Seelig; University of Illinois, Dr. Dean D. K. A. Steele, Professor A. C. Eycleshymer.

One of the interesting features of dedication week was the presentation to the Washington University Medical School of a number of manuscripts and papers of William Beaumont by his granddaughter, Miss Irwin. Included among these are the original manuscripts and notes of Beaumont's experiments on Alexis St. Martin and the agreement entered into by St. Martin to accompany Beaumont for a period of two years for the purpose of experimentation.

TWENTY-FIVE YEARS AGO

The Woman's Auxiliary to the American Medical Association under the presidency of Mrs. George H. Hoxie, Kansas City, Missouri, opened its annual convention in Detroit, June 23.

Mrs. J. Newton Hunsberger, Norristown, Pennsylvania, the new president, presided Thursday at the postconvention board meeting.

Published "Consecratio Medici and Other Papers." By Harvey Cushing, Surgeon in Chief of the Peter Bent Brigham Hospital, Professor of Surgery in the Harvard Medical School. Boston: Little, Brown & Co. This is a series of fourteen addresses, delivered in the period of 1904 to 1927 inclusive. Subject matter includes two important surgical addresses; problems of the medical school; problems of the medical library; the value of the historic vision in medicine; the value of books and literature to the medical man; the British Medical Corps in France; a sympathetic study of his friend, William Osler, the man; and the emancipators, Lister and Lincoln. Cushing as the man of letters, in 1925 received his accolade when awarded the Pulitzer prize for his remarkable biographic study of Sir William Osler.

W. C. Gaylor, M.D., of St. Louis, president-elect of the state society says, "We now have 72 medical schools in America with rigid premedical educational requirements, full time teachers, and adequate equipment, buildings and endowment. The number of unqualified individuals practicing medicine gives us reason to believe that there is a shortage of physicians. There are backache specialists who sell corsets, and there are eye specialists and foot specialists who have had no medical training. Nonmedical persons are doing our x-ray and laboratory work, nurses give anesthetics and druggists of the chain store type encroach on the practice of medicine."

More than $40,000 has been subscribed toward the $50,000 that the Rolla Chamber of Commerce has been soliciting to build a hospital in Rolla. Wilks Hyer, head of the Penney stores in St. Louis has offered to give $50,000 provided the citizens of Rolla and surrounding country raise an equal amount. The institution will be called the May Hyer Memorial Hospital.

TEN YEARS AGO

The pressure of modern war, in contrast with life in peace time, is well shown in the figures of CDD's in the Army. In the first six months of 1944, 48 per cent of discharges were for neuropsychiatric disorders. It should be emphasized that most of

(Continued on page 606)

When she's frightened and tense (*and getting more upset by the minute*) . . .

When she balks at scary, disquieting examinations (*before you've even begun*) . . .

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Woman's Auxiliary

MRS. FRANK B. LEITZ, *President*

The following eleven delegates represented Missouri during the convention of the Woman's Auxiliary to the American Medical Association in Atlantic City, New Jersey, June 6-10: Mrs. William Bayne Allen, Kansas City (Jackson County); Mrs. Arthur S. Bristow, Princeton (Grand River County); Mrs. Victor B. Buhler, Kansas City (Jackson County); Mrs. A. J. Campbell, Sedalia (Pettis County); Mrs. Theodore F. Edwards, Kansas City (Clay County); Mrs. William H. Hickerson, Independence (Jackson County); Mrs. Frank B. Leitz, Kansas City (Jackson County); Mrs. Floyd H. Maples, Mount Vernon (Ozark County); Mrs. Robert C. McClanahan, Kansas City (Jackson County); Mrs. Joseph S. Summers, Jr., Jefferson City (Cole County); Mrs. Edward H. Thiessen, Kansas City (Jackson County). Mrs. Thomas S. Fleming, Moberly, member-at-large of the Missouri Auxiliary, was our guest.

Mrs. George Turner, El Paso, Texas, well known to and loved by many of us, presided at general sessions. On Thursday, June 9, Mrs. Mason G. Lawson, Little Rock, Arkansas, was installed as president and Mrs. Robert Flanders, Manchester, New Hampshire, was elected president-elect.

The morning of Monday, June 6, during a round table discussion on legislation, Mr. C. Joseph Stetler, Director, Law Department, A.M.A., and Mr. R. G. Van Buskirk, Staff Associate, spoke. We were told that approximately 10,000 bills had been introduced during the 84th Congress. About one third of these bills have medical implications. It was suggested that we direct our particular attention and efforts toward three or four of the most important. The following three bills were discussed: Reinsurance Bill (H.R. 3458—S.B. 886); Bricker Amendment (S.J.R. 1); Treaties and International Agreements, and Jenkins-Keogh Bills (H.R. 9—H.R. 10) Tax Postponement for Self-Employed.

The National Public Relations chairman invited us to participate in her round table discussion on Monday, June 6, and the afternoon of Wednesday, June 8, we were asked to participate in the Nurse Recruitment round table discussion of the National Nurse Recruitment chairman, Mrs. C. R. Pearson. These requests, without a doubt, came to Missouri as the result of superior reports sent by members of the St. Louis County Auxiliary to state chairmen, and by these state chairmen to corresponding National chairmen.

Tuesday evening's session in Convention Hall was a never-to-be-forgotten experience. More than 5,500 were privileged to hear such outstanding men as Dr. Walter B. Martin, President, American Medical Association; Dr. Elmer Hess, President-elect, American Medical Association; and Dr. Norman Vincent Peale, Pastor, Marble Collegiate Church, New York, who spoke on "The Relationship of Religion and Medicine."

It was a pleasure and honor to represent the Woman's Auxiliary to the Missouri State Medical Association as State Presidential Delegate. With mingled feelings of regret and anticipation we left Atlantic City on Thursday so as to be in Cambridge, Massachusetts, on Friday morning when our only and favorite son received his Bachelor of Science degree in Chemical Engineering from the Massachusetts Institute of Technology.

Missouri Medicine in Review

(Continued from page 604)

these will be able to adapt themselves to a non-military environment.

Medical literature passes through cycles. We are now in the period of penicillin. Most journals have one or two papers on the use of penicillin in this or that disease. The entire gamut of disease must be explored. When the end is reached, any cycle will have started.

Dr. E. V. Mastin, St. Louis, elected vice president of the Southern Medical Association at the last annual meeting, became president of the Association upon the recent death of Dr. Edgar G. Ballenger, Atlanta.

Dr. William E. Angell, Rocheport, celebrated his fiftieth anniversary in the practice of medicine on April 3.

Colonel Durward G. Hall, Springfield, Chief Personnel Service in the Surgeon General's Office, gave the commencement address at the recent graduation exercises at Drury College, Springfield.

Senator Robert F. Wagner writes to the Editor of the J.A.M.A. "On Thursday, May 24, I introduced with Senator Murray a bill, S. 1050, entitled: 'The Social Security Amendments of 1945.' The bill provides for 'The national security, health and public welfare.' " Representative Dingell of Michigan introduced a companion bill (H.R. 3293) in the House at the same time. "There is absolutely no intention on the part of the authors to 'socialize' medicine, nor does the bill do so. We are opposed to socialized medicine or to state medicine. The health provisions of the bill are intended to provide a method of paying medical costs in advance and in small convenient amounts. We wish to have it known that we invite constructive suggestions from the medical profession."

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Progress Notes of Prepayment Plans

Kansas City Blue Cross and Blue Shield

The annual report of the Kansas City Blue Cross and Blue Shield Plans, recently released, marks the 17th anniversary of the Blue Cross Plan and the 12th for Blue Shield. During the last year, Blue Cross paid doctors $3,749,140.77 for their services in 146,569 cases. In the same period, Blue Cross paid out $6,855,007.62 for nearly half a million days of in-patient hospital care in 56,394 cases, and in 11,968 cases of emergency room care.

The operating area of the Kansas City Plans was expanded in 1954 by the addition of eleven Missouri counties formerly in the St. Louis area. This transfer was made because it was felt the nearness of the counties to Kansas City would result in better service.

During the year the list of supporting doctors of Blue Shield climbed to more than 1,500. The number of member hospitals in Blue Cross was increased to 57 from the previous total of 30 institutions.

A decision of major importance, made during 1954, was the decision to erect a building to house the Plans' operation. An estimated savings of $400,000 over a ten year period is expected as a result of this decision. (This is a correction on a figure previously reported in this column.)

The governing board of Blue Cross reelected Bishop G. L. DeLapp, presiding bishop of the Reorganized Church of Jesus Christ of Latter Day Saints, as president of the Plan for a second term. Bishop DeLapp was a corporate member of Blue Cross when it was organized seventeen years ago. He has been a member of the Board of Trustees for about a decade.

Frank L. Feierabend, M.D., was reelected for his third year as president of Blue Shield. Dr. Feierabend served as chairman of the Jackson County Medical Society's prepaid medical committee for five years before the Kansas City Blue Shield Plan was founded. Other officers of the two Plans are: Blue Cross—David T. Beals, first vice president; John A. Growdon, M.D., second vice president and assistant treasurer; Charles L. Alyward, secretary; Ralph B. Innis, Sr., treasurer. For Blue Shield—Hubert M. Parker, M.D., first vice president; Forrest F. Dodds, second vice president; Arch E. Spelman, M.D., secretary; H. Wade Zimmerman, treasurer; and T. A. Johnstone, assistant treasurer.

The non-group enrollment campaign of the Kansas City Plans held in May provided service effective July 1, 1955, for approximately 8,500 new participants in the programs. The success of the campaign was in large part due to the outstanding cooperation given by physicians and hospitals in making enrollment materials available, and in telling patients about the opportunity to take out membership. The Plans have successfully, over a five year period, been able to offer enrollment without any age limit.

Pettis County Pot Pourri

C. Gordon Stauffacher, M.D.

A well developed 80 year oldster came to my office the other day.

"What is your trouble?" I asked.

"Well Doc," he replied, "My virility is too high."

Being rather astounded at this complaint, I said, "Mr. Brown, I've been in practice quite a few years but I've never heard that complaint before. What do you mean, 'Your virility is too high?' "

"It's all in my head," he replied sadly.

My stenographer wants to know why they don't discover some antibiotic that is easier to spell.

My 7 year old came up to me the other morning as I was hurrying to go out on a call and said, "Daddy, if you have some free time one of these days I want to tell you a long joke. I think it's real crazy. And, Daddo, the last part is the funny part."

In the psychiatrist's case the customer is never right.

I saw a patient a while back who was complaining of kidney trouble.

"Does your urine burn?" I asked him.

"Don't know, Doc," he replied, "I never tried to burn it."

Someone wanted to know if an infarct meant gas on the stomach.

We have a neophyte switchboard operator at the hospital, who operates the page system also. Recently we were surprised to hear this call ring out through the hospital. "Calling Doctor Factor. Calling Doctor R. H. Factor."

(Continued on page 610)

The Full-Liquid Diet pulls its own weight!

COTTAGE CHEESE
Grade "A"
JUICE
CARROT

Packing good nutrition into the full-liquid diet for your patient who must stay on it a long time is sometimes difficult. But with a blender or egg beater, almost any food can be used.

Mix the same foods many ways—

Strained chicken in milk makes "bisque"—in tomato juice it's "creole." Strained liver and bacon double-times the same way.

Your patient may like cottage cheese whipped into milk flavored with chocolate and mint, or he can blend it with cranberry juice sparked with lime.

Strained carrots go in milk, broth, or pineapple juice. Flavor the milk blend with nutmeg, the broth with parsley, and the juice with cinnamon and brown sugar. An egg or skim milk powder may be added for a protein bonus.

Strained fruits in fruit juices do well with a squeeze of lemon or a touch of mint.

Then serve them up with dash—

Bright colored drinks look good in clear glass—pale ones in gayly painted glasses. And if a mixture looks drab, hide it in a bean pot or a round jam jar wrapped in a napkin.

Add a bright plastic straw. And for garnish, try a sprinkle of spice, a spoonful of sherbet, a dab of whipped cream, or a lemon slice hooked on the edge of the glass. Or frost the rim by dipping the glass in water, then in sugar.

Of course, only you can tell your patient *just which foods* he can and must have for his specific condition. But these suggestions can help guide him within the limits you set.

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Missouri Academy of General Practice

KENNETH GLOVER, M.D.

Salk Vaccine

Our first polio vaccine was given last of April to the first and second grade school children. Almost two months have passed and we are still hoping to be able to complete the series this season.

At the onset we were told that the second vaccine should be given in two weeks and the third, four weeks later. Later we were told that the second should be given between three and four weeks and the third at the end of seven months. The present delay is due to several factors, some scientific and the remainder political.

In the letter that originated at the American Academy headquarters in Kansas City, our executive secretary makes this statement: "April 1955 will go down in the history of medicine as a month of polio hysteria." On April 21, 1955 *Time* magazine came out with the story reporting that "Washington hopes that the manufacturers can head off the vaccine black market, probably by allocating it directly to doctors—pediatricians first, then gynecologists, and general practitioners last." Our Secretary wired *Time* asking them if they did not know that 75 per cent of all the children were cared for by family physicians or general practitioners. He further reminded them that had they investigated more carefully *Time* would have found that plans from the beginning were for a system of allocation based upon proper distribution of children without discrimination for or against any particular group of doctors.

On April 29, 1955, Dr. Malcolm Phelps, our recently chosen vice president of the American Academy of General Practice, received notice of his appointment to the National Committee to supervise distribution of the Salk vaccine. He with representatives of the American Medical Association, the American Academy of Pediatrics, together with the health agencies is trying to get a proper distribution of the vaccine.

Each weekly news letter coming from Dr. Wilson of A.M.A. headquarters in Washington gives a list of four or five or more bills introduced by Senators and Representatives which have in mind the control of the Salk vaccine. It seems that each politician now is interested in helping to get his name attached to the program so that it will be good campaign material for the next election. Dr. Jonas Salk, who has been given credit for supervising this particular vaccine and who is no doubt chagrined many times by the method in which it has been footballed among the various people who are trying to evaluate it, has remained rather timid and, as he would chose to be, only interested in its proper and equitable distribution to those who need it. We believe in its value but we can not approve of the way it has been kicked around or the loss of time which may have cost some child a case of polio that would otherwise be free had he or she been given the vaccine at the proper time. Where the fault lies it is not our place to say but certainly if this is as valuable as it seems to be we can not but condone such distribution methods, such lack of tact in proper placement. May it be said in all fairness that those of us who have anything to do with distribution will be glad to do so, if and when such supplies are available.

Pettis County Pot Pourri

(Continued from page 608)

So tonight I had some free time for the long joke. Here it 'tis (as told to me with gestures).

I saw Willie Wooley Worm one day that was this long.

The next day I saw Willie Wooley Worm and it was this long (gesture showing twice as long).

"What happened to you, Willie Wooley Worm," I said.

"I ate my father," he replied.

"You shouldn't do that," I said.

The next day I saw Willie Wooley Worm again and it was this long (gesture showing twice as long as the time before).

"What happened to you, Willie Wooley Worm," I asked.

"I ate my mother," he replied.

"That's not nice to do that," I said.

The next day I saw Willie Wooley Worm again and it was this long (gesture showing another increase in length).

"What happened to you, Willie Wooley Worm," I said.

"I ate my brother," he replied.

"That's not the way to behave," I said.

The next day I saw Willie Wooley Worm again and it was this long (again gesture for increase in length).

"What happened to you, Willie Wooley Worm," I asked.

"I ate my sister," he replied.

"You're a bad Willie Wooley Worm," I said.

The next day I saw Willie Wooley Worm again and it was this long (gesture to show worm was back to original size).

"What happened to you, Willie Wooley Worm," I asked.

"I belched," he replied.

Missouri Medicine

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Vol. 52 August, 1955 Number 8

Medical Responsibility in Rehabilitation

ROBERT ELMAN, M.D., *St. Louis*

IN CONTRAST to apathy among physicians, rehabilitation has aroused great interest among the laity and, especially, among the many groups devoted to programs for social welfare. The objective of rehabilitation is simple—the restoration to the disabled person of a better or complete productive capacity. It is not surprising that this purpose arouses enthusiastic responses—human, economic and educational.

The human response is largely emotional because it rests on the idea of making a dependent, helpless, or partly helpless, fellow citizen into an active member of the community. The economic response is a direct attack on the tax load of the community by reducing the expenditure of public funds for the care of the indigent disabled. Since most of these are recipients of public assistance, restoration of their earning capacity results in a double economy; their conversion from tax consumers to taxpayers means not only saving in terms of their previous care, but also increased revenue to the government from payment of taxes due to their productive activity.

The educational response is less obvious. It is based on the idea of shifting the emphasis in the present general program for the training of the physician in the care of the sick, from one which deals almost entirely with the diagnosis and treatment of disease, to one which emphasizes primarily the diagnosis and correction of disabilities, in which, of course, diagnosis and treatment of disease plays an essential part. Medical educators are beginning to realize that there is a significant difference in these points of view. In the future, rehabilitation may find a place in the medical curriculum, not as a separate subject of study but rather as a method of approach in the total care of the sick—total in the sense of restoration of the patient as an individual able to participate more effectively in the work of the community.

REHABILITATION SERVICES

To be fully effective, rehabilitation requires an organized program based on the utilization and integration of all of the existing facilities of the community plus the addition of whatever services are missing. Only in this way can each patient receive whatever help he needs, whenever he needs it. This leads to his placement in a new job, resumption of his former job or the assumption of a better job. To reach this goal, a number of rehabilitation services are necessary. They fall into the following four general groups, one or more of which are needed by every disabled person.

1. *Medical Examination and Diagnosis.*—This is a *sine qua non.* It is mandatory before any person can be considered for rehabilitation, by the present Federal-State Vocational Rehabilitation Service. Medical examination is also required by law before any indigent person can claim financial support from the State Welfare Agency because of total disability.

2. *Medical Therapy.*—This includes any therapeutic procedure, medical or surgical, mental or physical, as determined by adequate medical examination, diagnosis and consultation.

3. *Vocational Counseling and Training.*—This service is indicated only in individuals who have no specific earning capacity or whose capacity can be increased. Although primarily a problem for professional experts in the vocational field as, for example, those in Departments of Education, the decision as to the need and the type of vocational help is often aided by adequate medical consultation.

4. *Job Placement.*—This is the final yet perhaps the most difficult and important of the various steps leading to complete rehabilitation. It is particularly difficult in partly disabled individuals whose handicap, though permanent, still allows them to perform many kinds of useful work. Job placement requires the cooperation of industry and of community leaders, particularly in the case

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Presented at the 97th Annual Session of the Missouri State Medical Association, Kansas City, March 27-30, 1955.

of individuals capable only of home or sheltered activities.

Occupational therapy is not listed separately because it often belongs in both the medical and vocational training fields and indeed a good center may combine a sort of job placement as well.

It must be emphasized that not all disabled persons require all of these services, but everyone requires at least the first, and usually the second. Thus all disabled individuals will need the services of a physician for diagnosis with or without therapy. Many also could be benefited by the advice of a physician in carrying out further steps toward their rehabilitation.

Despite the obvious need for medical help, we, as physicians, unfortunately have been negligent in this field. It will be impossible, in my opinion, to go very far in an adequate rehabilitation program without the active participation of physicians.

A notable exception is the physician who is interested in or who has specialized in physical medicine and rehabilitation. But of such there are far too few. In many cases, moreover, these physicians have unfortunately been forced to limit their interest and activities to those patients who require physical methods of therapy. Such patients usually have severe physical handicaps, such as hemiplegia, paraplegia, cerebral palsy, amputations. Rehabilitation even in this group is often inadequate because most communities lack proper facilities, a deficiency which applies not only to physical plant and equipment, but also to personnel. But physical therapy is not necessary in a fairly large group of the disabled as, for example, the mentally ill. As a result, such large groups tend to be seriously if not completely neglected.

Vocational evaluation and training are not needed by all disabled individuals. It has been estimated that only about 30 per cent of those who could benefit by a rehabilitation program need vocational help. This figure may be much lower. For example, in the Springfield district of Missouri in the fiscal year 1953-1954 only 28 or 14 per cent of 201 persons successfully rehabilitated were training cases. I might also cite a pilot survey made in one of the large hospitals in St. Louis. It was found that less than a third of those entering the surgical wards needed vocational guidance or training. The others had adequate jobs to which they would return as soon as their disability was corrected. In most cases, of course, on a surgical ward, physical restoration meant merely the reduction of a fracture or the performance of a surgical operation. It was found, however, that although vocational guidance was seldom indicated, physical therapy and rather simple nutritional advice and psychotherapy were often neglected and when used proved quite effective in shortening the period of convalescence and the time lost before getting back on the job.

Job placement as the final and most important step in rehabilitation is often woefully neglected. Most communities lack adequate facilities for job placement, especially when the individual has a permanent physical handicap such as the loss of an arm, or a nervous handicap such as epilepsy. This deficiency is sometimes the result of race discrimination. More commonly there is a lack of means for finding special types of jobs for which many of these individuals may in fact be especially well qualified. For those with severe and permanent impairment in locomotion and for whom, therefore, a sheltered workship is essential, the problem is even more difficult, for without such facilities productive activity is difficult or impossible.

Plans for the Future.—Among the many groups in the community interested in establishing adequate rehabilitation programs, there is often a general feeling of aimlessness and frustration. Much of this is due to a confusion of terms and to a lack of definition of ultimate objectives. In many cases, rehabilitation has been considered synonymous with physical medicine which, as mentioned before, is really only one phase, though a decisive one in certain types of disability.

Much of the confusion stems from failure to realize the full scope of rehabilitation and the importance of integrating the various services it involves. I know of cases in which an agency spent months trying to train a disabled person before realizing that a remediable medical condition was present, a condition which some other agency should have handled first.

Each disabled individual, it should be repeated, must have the benefit of one or more of the four facilities described to achieve final placement in productive activity.

How can this unified functioning be reached? Many methods have been suggested and used. In my opinion, the simplest is the one originally set up by the Vocational Rehabilitation Service in Missouri, and later adopted in a large proportion of the states. This program is based on the part time use of physicians called Medical Consultants, who work directly with case workers in planning the program for each disabled individual accepted for rehabilitation. Details of this program were described in MISSOURI MEDICINE by Dr. Mantz and myself seven years ago.* A similar but improved plan was set up two years ago by me as a pilot study at the Homer G. Phillips Hospital, St. Louis, to deal with in-patients needing rehabilitation. The improvement consisted of selecting as case workers only those with professional training in medical social work. This is not necessarily done by the Vocational Rehabilitation Service in Missouri at present.

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* Elman, R., and Mantz, H. L.: Rehabilitation in Missouri at the "Grass Roots." J. Missouri M. A. 45:670, 1948. At the present time there are only 5 medical consultants, each serving in various sections of the state except for the St. Louis area, which for eight months has had no medical consultant. Moreover, the position of state medical consultant, formerly held by the late Dr. Mantz has not been filled, as far as is known.

Scrutiny of the rehabilitation situation in this and other states shows discrepancies in meeting the total problem. While the methods used have worked out fairly well and much good has been done, excellent results have been too limited in relation to the need. For example, in all of Missouri only 1,072 persons have been rehabilitated by the State Vocational Rehabilitation Agency during the fiscal year 1953-1954. The total number of disabled adults in the state as judged by the sums expended for direct and indirect public relief is probably in excess of 300,000. It has been estimated that at least 40,000 disabled adults in the state are capable of being rehabilitated. It is thus apparent that the accomplishments, though very considerable, fall far short of the goal. Much of the difficulty has been administrative, and much due to lack of funds. This was realized at the federal level when the present new Public Law 565 was passed. Among other features, it makes possible a great expansion of the present rehabilitation program by the appropriation of increasing financial support.

It seems clear to me (whose interest dates from his membership on the National Professional Advisory Council which set up the "Manual of Policies" guiding the present Vocational Rehabilitation Service in 1943) that it is impossible for Departments of Education to do an effective job of rehabilitation alone. While they are equipped to furnish vocational aid which is necessary for many disabled individuals, others do not need such aid. Moreover, in order to get the full benefits of modern medical knowledge as suggested, it is necessary that the scope of rehabilitation work be widened, an expansion best achieved under the guidance of physicians who, as a group, are the only ones trained to recognize and treat all kinds of human disability. The need for professional direction was recognized at the federal level, for a strong recommendation was made in the "Manual of Policies" that each state set up a professional advisory committee. This was done in Missouri in 1944, but was allowed to become inactive and has not met in the past several years. Professional guidance of the highest caliber must be the starting point and basis of all rehabilitation programs. The possibilities have already been amply demonstrated even with the present though limited facilities of the Vocational Rehabilitation Agency. But much more can and should be done.

As an example of the potential scope of rehabilitation in Missouri, more than $125,000,000 a year is spent for the support of various groups of citizens unable to earn their living. This does not include the expenditures of more than 50 millions for the mentally disabled, the chronically ill and other hospitalized indigents. Yet not one cent of this vast sum is being spent for rehabilitation, nor is there any systematic planned method in prospect, although a start has been made by the Vocational Rehabilitation Agency, which has reported, for the fiscal year 1953-1954, 217 successful cases whose previous major source of support was public welfare. This, of course, is but a "drop in the bucket."

While it is true that much of this money cannot be saved, it is also likely that the expenditure can be considerably reduced, up to 20 per cent or $35,000,000 or more per year by restoring many of those on relief rolls, and under custodial care in hospitals, to partial or full economic activity. It is only under the leadership of the medical profession that this objective can be most fully attained.

SUMMARY

An adequate rehabilitation program in terms of effectively restoring the disabled indigent citizen from tax consuming to tax paying activity is an important part of the community's responsibility. In this process medical aid is necessary in all cases in terms of examination and in about 35 per cent of the cases in terms of medical therapy. Medical aid is also of value in vocational guidance and in job placement, yet the medical profession has lagged behind other groups in assuming responsibility for this important problem. The intimate participation of qualified physicians at all levels can help greatly to expand the scope of rehabilitation and to reap the tremendous benefits which can follow.

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The Dry Skin Problem

NORMAN TOBIAS, M.D., *St. Louis*

To define dry skin is not a simple matter since dryness may be a matter of degree or personal evaluation or merely a sensation. The pathologic dry skin is one which is clinically manifested by an uncomfortable feeling of tension and one which exhibits roughness or scaling as a result of a reduction in the secretion of sebum. As regards terminology, there is some confusion of terms but all refer to the same thing, except in the matter of degree. Xerosis is probably the best term to cover an acquired dryness, while asteatosis signifies total absence of sebum as a result of sebaceous gland atrophy and xeroderma refers to a congenital subichthyotic condition.

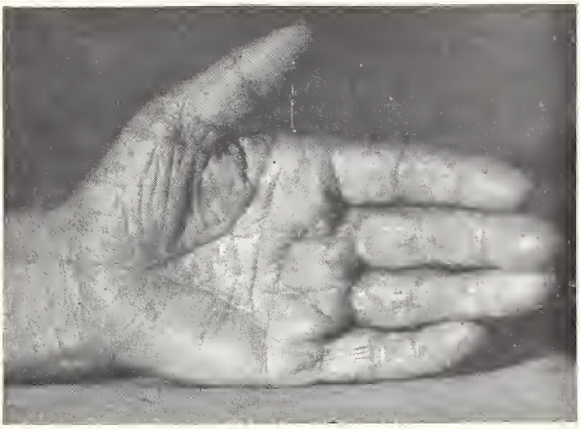
Fig. 1. Dry palms (occupational) from contact with chemical solvents.

Any condition which interferes with the physiologic secretion of sebum will cause xerosis. The production of sebum which occurs on all parts of the body where hair follicles are present is a continuous process and as far as is known is not under the control of the nervous system as is sweat secretion. The fatty acids, glycerides, cholesterol and waxes in sebum give it its lubrication action. Sebum also appears to restrain the excessive loss of water in the sweat secretions. After puberty the fatty acids have a fungistatic effect on the flora of the scalp which accounts for the rarity of ringworm of the scalp in adults. The normal sebaceous secretion is increased during puberty, menstruation, pregnancy and humid weather.

Symptoms.—Many women complain of excessive oiliness in the central part of the face while the outer cheeks are subject to dryness and slight scaling. This is a normal physiologic condition. Dryness may vary from a mild, uncomfortable feeling to a roughness and harshness. The skin may exhibit fine scaling, lack of elasticity, exaggeration of the normal folds, numerous fine lines and even superficial fissures. In the case of dry scalp there is excessive scaling; the hair lacks luster and may break off. If the nails or finger tips are involved, hangnails are common and superficial fissures in the subungual areas are frequent.

In generalized xeroderma, the following diagnostic signs are usually present: (1) generalized dry rough slightly scaly skin, (2) thickening of the palms with exaggeration of the creases, (3) roughness, dryness and slight scaling and discoloration of the elbow and knee caps, (4) rough goose-skin appearance of the extensor surfaces of the upper arms and (5) polygonol scaling over the tibiae. Local medication must be used with care in these patients as eczematization frequently occurs.

Dry palms are characterized by a feeling of tightness, fissures in the creases may develop, and there is some interference with movement of the fingers and with touch sensation to some degree. When dryness is limited to the extensor surfaces of the elbows and knees, friction may cause a goose-skin condition (keratosis pilaris).

Xerosis of the heels is associated with moderate hyperkeratosis and slight scaling. It is caused by intermittent pressure resulting from wearing loose-fitting shoes.

Etiology.—Physiologic xerosis is more frequent during the winter season when the relative humidity goes below 60 per cent and when the cold air currents cause a vasoconstriction of the superficial blood vessels and interfere with the sebaceous and sweat secretions. Other local causes include too frequent hot baths, alcohol "rub-downs," excessive contact with alkaline soaps and detergents, the presence of excessive alkali in the municipal

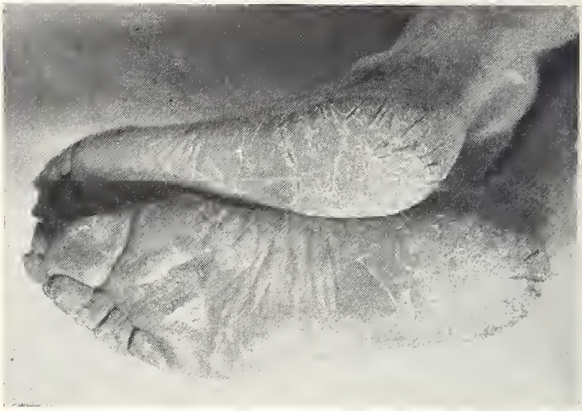
Fig. 2. Occupational hyperkeratosis of the soles in a patient with a dry skin. Long periods of standing on a cement floor was cause.

water supply or excessive use of astringent cosmetics. Dry hands is a common complaint among young mothers and housewives when duties consist of frequent immersion of the hands in water containing detergents. Hospital patients often develop xerosis of the elbows and knees from friction with starched bed linen after some weeks of hospitalization.

Xerosis may also develop secondary to various therapeutic measures including x-ray therapy and excessive use of astringent lotions (e.g. Calamine lotion, Caladryl and Lotio Alba and various shake lotions), especially in cold weather. Dryness of the hands is also frequently seen in those occupations in which defatting and degreasing agents are frequently used (e.g. benzine, carbon tetrachloride, naphtha, kerosene). Eczematization is a common complication with or without secondary infection.

Schwartz[1] calls attention to the frequency of follicular eruptions on the calves of the legs, cubital and popliteal fossae as a result of friction from heavy clothing and sweat retension in workers with xeroderma during the winter season. These cases should not be mistaken for an occupational dermatitis.

Xerosis also may occur from a lack of water in the subcutaneous tissues or from a slow rate of diffusion of moisture from the subcutaneous blood vessels. Generalized dryness of the skin in febrile and wasting diseases as a result of dehydration is too well known to merit more than passing mention.

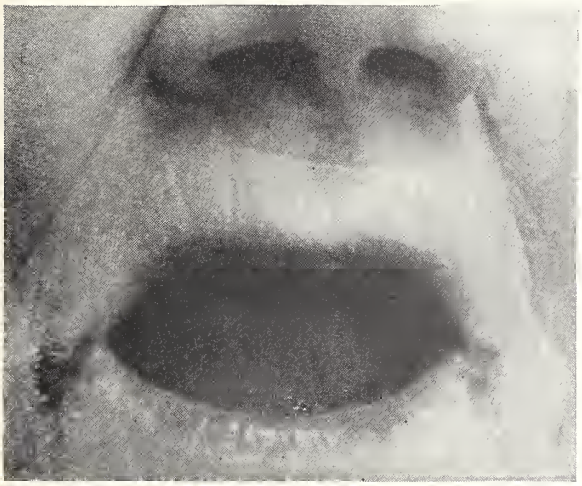

Fig. 3. Angular stomatitis in an elderly patient with a dry skin and with vitamin B deficiency.

Xerosis in the senile person is often a distressing condition if associated with intense pruritus. The lower extremities are chiefly involved. It is not only the result of a physiologic atrophy of the sweat and sebaceous glands and poor circulation, but thinning of the epidermis as well, resulting in exaggerated hyperesthesia to cold. Fissures at the corners of the mouth are also seen in the aged as a result of dryness and other factors.

Xerosis in infants is usually confined to the face and, unless treated early, results in varying degrees of infantile eczema.

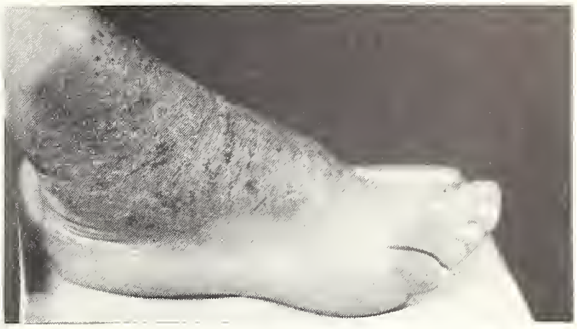

Fig. 4. Chronic neurodermatitis resulting from pruritus in a patient with dry skin.

Xerosis is frequent in the dry type of atopic eczema in which it is limited usually to the anterior aspect of the neck and the antecubital and popliteal spaces. In these cases the skin is thickened and may exhibit excoriations from scratching. Failure to correct the condition may result in an exacerbation of the eczema which is difficult to control. Temporary dryness of the skin often follows excessive tanning of the skin from sun exposures and excessive sea bathing.

In middle aged women, there may be a strong psychogenic factor which interferes with normal sebaceous and sweat secretion resulting in localized dryness of the face, hands, lips and eyelids. If unrecognized these conditions can become difficult to control.

Complications.—The commonest effect of xerosis in cold weather is chapping which is a temporary condition. Localized neurodermatitis is a fairly common condition resulting in certain predisposed individuals as a result of uninhibited rubbing a localized pruritic dry area. Dryness of the palms if untreated predisposes to fissures in the creases.

Stokes[2] lists the harmful effects of the ichthyotic or xerodermatous mechanism: (1) easier penetration by irritants resulting in dermatitis; (2) greater susceptibility to chemical trauma from alkaline cleansers; (3) greater liability to bacterial infection, and (4) decreased resistance to industrial dermatoses from alkalies and fat solvents. To this list I would add a tendency to sunburn easily.

Nummular eczema is a less common condition consisting of one or more round, dry, scaly or papulovesicular patches usually involving the legs or forearms, dorsum of the hands or buttocks. The etiology is debatable but xerosis is a predisposing cause. Since sebum is fungistatic and bacteriostatic, xerosis predisposes especially to infective eczemas in industry.

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[1] Schwartz, L.; Tulipan, L., and Peck, S. M.: Occupational Diseases of the Skin, Lea and Febiger, Philadelphia, 1947, p. 122.

[2] Stokes, John H.: Fundamentals of Medical Dermatology. Dept. of Dermatology Book Fund, Philadelphia, 1942, pp. 36-37.

One of the most frequent complications of xerosis is "housewives eczema" resulting from frequent contact with detergents and alkaline soaps and incomplete drying of the hands. These eczemas usually start at the base of the thumbs, webs or sides of the fingers and then spread upward to the wrists and forearms. Individual predisposition and psychogenic factors may also play a part in the production of this condition.

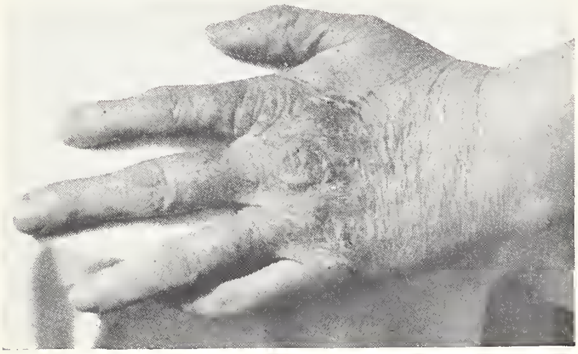

Fig. 5. "Housewife eczema" caused by dryness and strong soaps.

Differential Diagnosis.—Xerosis must be differentiated from keratosis pilaris which is congenital, usually involves the outer arms, thighs and buttocks, is only evident during the colder months and consists of tiny, rough, follicular papules, slightly grayish in color or the color of the normal skin. Ichthyosis is characterized by a more pronounced, generalized scaling which is present the year round, exaggeration of the normal lines of the skin and excessive dryness. This condition is often hereditary.

Pseudo-ichthyosis is usually seen in senile patients with peripheral vascular disease. The skin of the legs is dry and is covered with large, thin polygonal scales which are more or less adherent to the underlying skin.

The dry, harsh skin and hair of the hypothyroid patient is too well known to merit more than passing mention.

Dryness from vitamin A deficiency (phrynoderma) is rare in this country, except in the chronically ill with severe malnutrition, liver disease or advanced diabetes. This condition is characterized by extreme dryness of the skin and mucous membranes. There are follicular hyperkeratoses, as well as ocular disturbances.

Treatment.—Treatment naturally depends on the cause. Internal therapy is seldom required in the mild cases. It is difficult to evaluate internal medication such as thyroid extract or vitamin A because one must in addition prescribe ointments or oils for local use. Hormone therapy in my experience seems to be effective in some cases of senile pruritus with dryness while small doses of thyroid appear to improve the condition of the skin in patients with low basal metabolism rates. In patients who are undernourished, large amounts of water and multiple vitamins appear to be effective. In cases of malnutrition presenting symptoms of vitamin A deficiency, 100,000 units of Aquasol Vitamin A daily, orally or by injection, are useful.

Baths.—Patients with extremely dry skin and those with atopic eczema may not tolerate water at all, but must limit their bathing to sponge baths. These patients should experiment after bathing with one of the following oily lotions: light mineral oil, Lotocreme (Abbott) Lubriderm or liquid Nivea. In some cases two or three teaspoonfuls of liquid Nivea placed in the bath water helps to overcome the drying tendency of the bath. In patients who have a congenital type of dry skin frequent Turkish baths may be useful during the cold weather months.

Local Therapy.—Fissures in the palms or heels may respond to 2 per cent salicylic acid in diachylon ointment. Dry brittle nails often respond to applications of castor oil or the more expensive expressed oil of almonds.

Protective applications include oils, lotions and ointments. These products act as emollients, exclude air and prevent evaporation of water from the skin. Animal, vegetable or mineral preparations may be satisfactory, depending on individual idiosyncrasy. A good one to use is olive oil 10 per cent, lanolin 70 per cent and aquaphor q.s. 100. Chapping of the hands can be controlled with toilet lanolin (Burrough Wellcome) or Olive Jel (Research

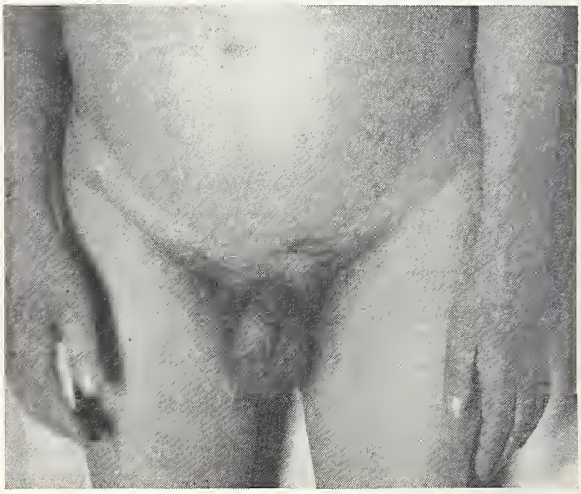

Fig. 6. Congenital xeroderma with definite scaling; always associated with pruritus in winter.

Products Corp.). These are best applied at night, rubbed in vigorously and cotton gloves put on. Those who object to greasy oils or ointments may try Wibi lotion (Dara products) or Nepto lotion (E. L. Patch Co.). While ointments containing vitamin A (Ess-A-Creme, Dome Chemicals, Inc.) and Vitamins A and D ointment (White Labs., Inc.) are satisfactory emollients, there is no scientific evidence that the vitamins are absorbed by the unbroken skin.

Climate.—Patients with senile pruritus and xeroderma who suffer during the colder months and who do not respond to local therapy should seek the warmer climates of southern Florida, Texas or Arizona.

SUMMARY

Dryness of the skin may be generalized or localized, acquired or congenital.

Acquired xerosis may be caused by various internal and external factors.

The dry skin is subject to various complications such as localized neurodermatitis, nummular eczema and eczematization.

The patient with a dry skin is a potential risk in occupations in which contact with alkalies and fat solvents is possible.

The therapeutic management of the various types is discussed.

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Management of Dermatitis Venenata

Due to Contact With Poison Ivy and Allied Plants

CHARLES C. DENNIE, M.D., *Kansas City*

IN SPITE OF the fact that the human race has been dogged by poison ivy eruptions since the appearance of man upon this earth, there has been no consistent and efficient treatment for the relief of is symptoms. First, one must avoid ointments of all kinds. The use of any grease base, whether it be grease or water soluble base, simply spreads and aggravates the dermatitis. Evidently the acid resin of the plant is more finely divided and reaches more parts of the skin. Yet ointments are continuously used and advised for this condition. Second, oily lotions likewise are prohibited for their actions are really more damaging than that of the ointments, since they are more fluid. Third, the lotions containing any of the drugs ending in -caine or belonging to the quinine group are absolutely prohibited for they often produce the exact duplicate in eruptions that the patient has already suffered from the poison ivy. They are highly sensitizing agents. There are no protective creams up to the present time that have been used successfully to neutralize the poison ivy toxins unless it should be the application of some of the silicones to the intact skin of the arms, face and legs of those who are in danger of coming in contact with these plants. I am sure that these substances would protect the patients, but they are rather unsightly and make the patient quite uncomfortable after application.

Immunization with poison ivy extracts, either in oil, alcohol or water, has been a failure in my hands. There is no scientific reason why they should raise the immunity of the patient. While there have been a few instances of almost miraculous cures from these substances in acute dermatitis venenata, yet the disadvantages of their application far outweigh any good that might come from their use. In fact, the opposite result is quite often obtained. The patient not only suffers from the contact with the poison ivy but he also suffers additional injury from the injections. It has been necessary for me to hospitalize patients who have had poison ivy injections while they were suffering acutely from the disease on account of the tremendous edema that was produced by the injectionable toxin. I would strongly advise that this injectable substance be not used in the treatment of dermatitis venenata. Immunization with the oily solution of the acid resins also has been a failure in my hands. One of my first patients to whom I gave poison ivy injections over a quarter of a century ago contracted a worse case of poison ivy dermatitis on his first contact with it the week after the injection had been given than he has had in his life. He is a prominent skin specialist in our city today. I have never seen a case yet that came in contact with poison ivy after the injection but that he did not suffer some damage from the contact; therefore I have discarded this method of immunization. The only sure way of avoiding poison ivy dermatitis is not to come in contact with the ivy, or be in its vicinity.

I will outline the specific management of the specific case. Fuhrman et al. have called attention to the use of small doses, 10 to 15 units, of ACTH, given every other day for three to five doses in the control of the itching. It evidently does control, to a large extent, the itching but it has no effect upon the vesiculation itself. Simultaneously with the intramuscular injection of the ACTH one should give either 1 gram of sodium theosulphate or 5 ccs. of calcium ascorbate intravenously.

The use of baths and of local applications are the most efficient of all the measures that one uses in the control of this trouble. The physician has the choice of two types of baths: (a) 1 to 10,000 solution of potassium permanganate in the bathtub, or (b) two tablespoons each of epsom salts and soda dissolved in a bathtub full of water. The former bath has a tendency to oxidize the acid resin and the latter has a tendency to make a neutral substance of it. The stains of potassium permanganate can be removed from the tub with lemon.

The last measure, and the most effective one, is the use of a lotion. It must be non-sensitizing, non-irritating, drying, an acid neutralizer, antipruritic and healing. It must also have an alkaline menstruum with the addition of not more than 1 per cent of some of the crude phenol derivatives. Most physicians have their own pet remedy but they do not always have the correct combinations. With this information as a basis, one can concoct a water shake lotion that will accomplish most of the things herein stated.

SUMMARY

Do not use ointments, oily lotions, lotions containing any of the -caines, quiniline derivatives, picric acid or lead. If one follows the directions herein presented he will be successful in drying up the lesions and not sensitize the patient.

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Professor Emeritus of Dermatology, University of Kansas Medical School.

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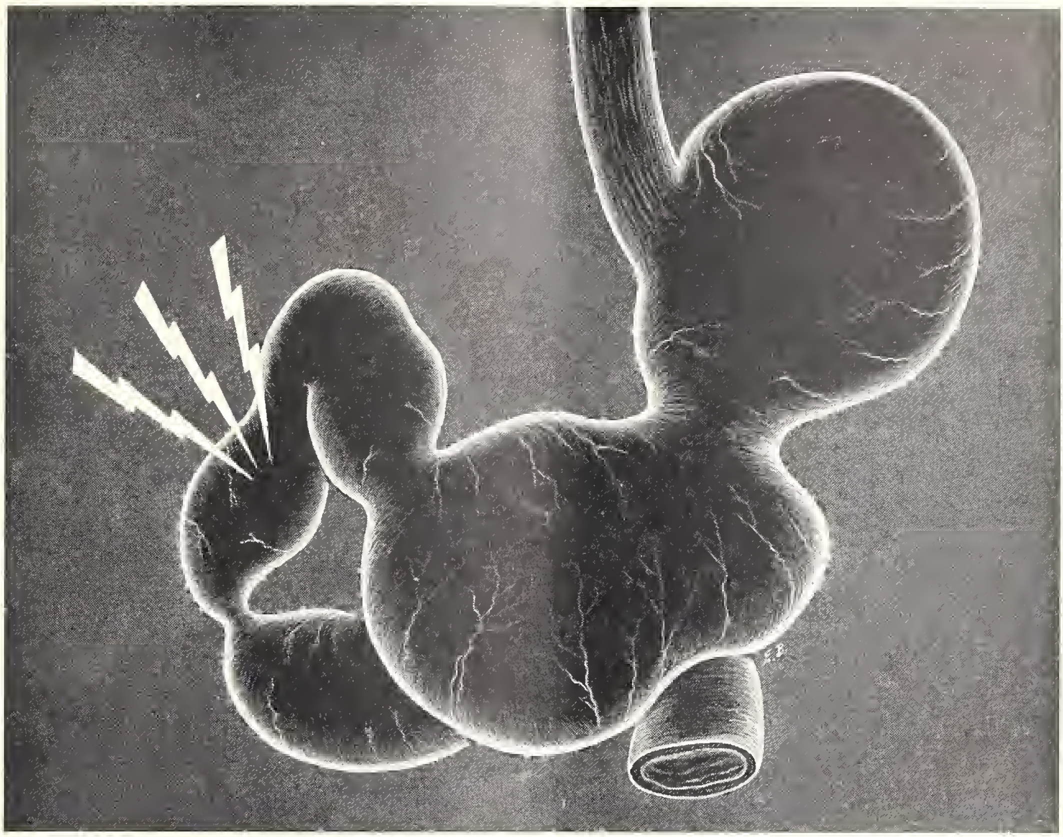

Abnormal Motility as the Cause of Ulcer Pain

Until recently the general opinion was held that ulcer pain was primarily caused by the presence of hydrochloric acid on the surface of the ulcer.

Present investigations[1,2] on the relationship of acidity and muscular activity to ulcer pain have led to the following concept of its etiologic factor:

> "... abnormal motility[2] is the fundamental mechanism through which ulcer pain is produced. For the production and perception of ulcer pain there must be, one, a stimulus, HCl or others less well understood; two, an intact motor nerve supply to the stomach and duodenum; three, altered gastro-duodenal motility; and four, an intact sensory pathway to the cerebral cortex."

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1. Schwartz, I. R.; Lehman, E.; Ostrove, R., and Seibel, J. M.: A Clinical Evaluation of a New Anticholinergic Drug, Pro-Banthīne, Gastroenterology *25*:416 (Nov.) 1953.

2. Ruffin, J. M.; Baylin, G. J.; Legerton, C. W., Jr., and Texter, E. C., Jr.: Mechanism of Pain in Peptic Ulcer, Gastroenterology *23*:252 (Feb.) 1953.

SEARLE

Postgraduate Review

Nutritional Management of Infants and Children

ROBERT L. JACKSON, M.D., *Columbia*

KNOWLEDGE has increased rapidly in the present century, requiring many changes in methods of nutritional management of infants and children. We have learned that the condition of the mother during pregnancy affects the health and welfare of her baby and that infants are not "born equal" insofar as the storage of nutrients is concerned. Artificial feeding of infants has become so easy and successful that the importance of breast feeding is underestimated and needs to be restressed. Foods other than human milk or suitably modified cow's milk have been added to the infant's diet closer and closer to the time of birth in order to meet known nutritional needs. In general, increased nutritional knowledge is receiving greater application in feeding of infants than for older children. Four nutritional essentials require special emphasis in childhood; namely, protein, calcium, vitamin D and the B group of vitamins.

Studies of diets of pregnant women show that the poorest dietary habits are found among the very poor and the very rich. In addition, the large group in between these two categories could be better fed than they are in protein, calcium, vitamin D and probably the B group vitamins.[1, 2] Vitamin preparations frequently are provided in excess as pharmaceutic products. The same money spent for meat and milk would make the diet more nearly adequate in all known essentials. Particularly the idea prevalent among some doctors that calcium salts are a complete substitute for milk deprives the mother of excellent protein, vitamin A, riboflavin and some thiamine, all at considerable expense to herself.

The incidence of prematurity has been shown to rise sharply with decreasing maternal nutritional status. In a group of 404 pregnant women of low income living in rural Iowa, it was observed that the infants born to the most poorly nourished mothers had the lowest birth weights, the lowest vitality, and the highest mortality.[3] Burke, Harding and Stuart[1] observed that the birth size of the infant, both weight and length, tended to parallel the protein intake of the mother during the last six months of pregnancy. In the Iowa study, the protein intake also was found to be an excellent indicator of the adequacy of the diet in general. The number of pregnancies and their rapidity of succession also was found to be important since maternal nutritional reserves tend to be exhausted unless the mother is receiving excellent care including an optimal diet during and between pregnancies.

THE PREMATURELY BORN AND IMMATURE INFANT

Nearly half of the protein and calcium of the newborn infant is deposited during the last four weeks of normal gestation. Although human milk is admirably adapted for the full term baby, it will be impossible for the prematurely born infant to "catch up" if fed only human milk. It is therefore desirable to add dry skimmed milk or calcium caseinate to human milk or to use a modified cow's milk formula. A formula with a low fat content is preferable as fat is tolerated poorly by immature or sick infants. Because of the susceptibility of the prematurely born infant to rickets, it has been the practice of most physicians to give large amounts of vitamin D. Recent studies show that the prematurely born baby requires no more vitamin D than does the baby born at term.[4] Increased vitamin D does not compensate for the low mineral intake. The chief reasons the prematurely born baby is highly susceptible to rickets are the low calcium and phosphorus content of the body at birth and the frequent failure to supply sufficient of these minerals after birth.

The prematurely born infant is particularly prone to rapid changes in water metabolism and becomes dehydrated or edematous far more quickly than the full term infant. The kidney of the premature infant is incompletely developed and cannot concentrate urine, so the water requirement is relatively high. The total amount of fluid needed in twenty-four hours is approximately 150 ml. per kilogram, and the basic chloride requirement is supplied by 50 to 100 ml. of normal saline solution. Hepner has shown that excessive electrolyte intake may precipitate acute retrolental fibroplasia.[5]

The prematurely born baby's enzyme systems are incomplete. Oxidation of carbohydrates may not proceed to carbon dioxide and water but stop with the formation of organic acid, as lactic and pyruvic acids. Sodium citrate, therefore, is a better agent to modify the curds of cow's milk in feeding of prematurely born infants than is citric or lactic acid. One teaspoonful of 25 per cent solution is sufficient for a quart of milk or 1 grain of powdered citrate to each 2 ounces of milk. Certain

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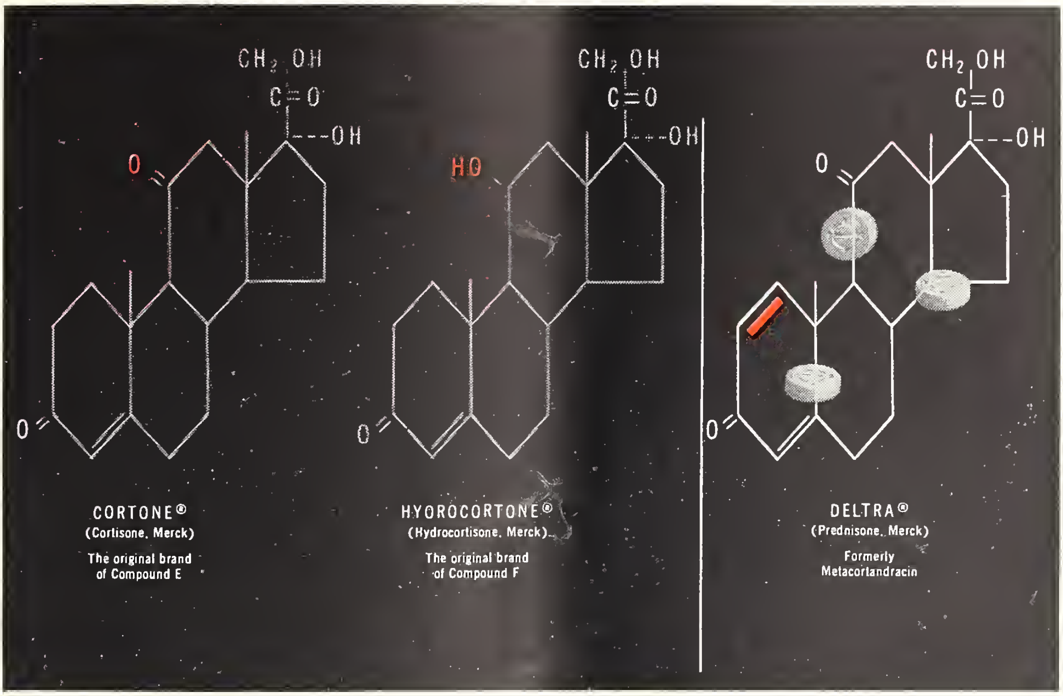
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of the amino acids, particularly phenylalanine, are metabolized with difficulty by prematurely born infants. It has been found that the addition to the diet of larger amounts of vitamin C (50 mg.) aids in the metabolism of the amino acids.[6]

BREAST FEEDING

Despite all knowledge of infant nutrition and the current refinements of artificial feeding, feeding at the breast of the mother continues to offer definite advantages both to the mother and her infant.

Many influences have crept into modern living to sway the mother from breast feeding her child. Some mothers have accepted the common practice of artificial feeding as more convenient and adapted to their way of living. Many others do not understand the advantages of breast feeding and have not had them explained to them. More frequently than is recognized the father is the strong advocate for artificial feeding for many unsound reasons. Breast feeding cannot be done by the unstable or selfish mother or without the active support of her husband and doctor. Parents cannot learn too soon that they must give of themselves to provide emotional growth of their child.

The social trend toward hospitalization for childbirth has moved amazingly fast in this country. Hospitalization for childbirth has been accompanied by a substantial decline in breast feeding. In many hospitals the conditions of crowding, lack of trained personnel and inadequate equipment make the possibility of introduction and spread of infection in the newborn nursery a constant danger. Both the fear of infection and hospital convenience have made present day nurseries overmechanized, and the whole procedure has become artificial.

Breast feeding on a self demand basis is the ideal arrangement. A hospital procedure such as "rooming-in" promotes natural happy relationships, fosters maternal nursing, and gives the father a chance to enter the family circle at an earlier time and to become acquainted with the baby. Too frequently, depersonalized and mechanized hospitals make the parents feel acutely that the institution exists for the sake of procedure and personnel rather than for the care of the mother and baby. It is a deplorable commentary that infection, morbidity and lack of hospital personnel rather than common sense are responsible for permitting babies to be with their mothers.

Preparation of the mother for nursing of her baby must start under the direction of her physician early in pregnancy. The prospective mother must be educated to understand the importance of breast feeding. In advising breast feeding, care must be taken not to impress the importance to such a degree that the mother will feel inadequate or blameworthy if it becomes impossible for her to nurse her baby.

ARTIFICIAL FEEDING

When an infant is deprived of human milk, cow's milk easily can be modified to meet the infant's nutritional needs. The amount of fresh cow's milk given the young infant should approximate 1.5 to 2 ounces for each pound of expected body weight. The amount of carbohydrates added should approximate 6 to 8 per cent of the total quantity of milk. Monosaccharides and disaccharides as well as dextrine are tolerated, but starches cannot be digested by young infants. It is my preference to use fresh boiled cow's milk with a low fat content for the first few weeks or months after birth and to compensate for the loss of calories by adding carbohydrates. If the infant has any signs of intolerance, the relative amounts of protein, fat or carbohydrate can be adjusted easily. Evaporated milk fortified with vitamin D long has been one of the most popular and widely used foods for artificial feeding. Its advantages are well known and need no reiteration here. When properly diluted and supplemented with vitamin C, it adequately meets the needs of the normal young infant. Evaporated milk formulas tend to be slightly more laxative than fresh milk formulas, but well within the tolerance of most healthy newborn and very young infants.[7] A fresh or evaporated milk formula can be rendered more digestible by acidification. Acidified milk is so easily digested that dilution rarely is necessary for feeding even young infants. Mixtures of this type are of special value for the feeding of infants who regurgitate when larger volumes of a less concentrated formula are taken. To prepare acidified milk approximately 100 drops of lactic acid (U. S. P. 85 per cent) or 1 teaspoonful of a 25 per cent solution of citric acid or 2 teaspoonfuls of 36 per cent acetic acid U. S. P. or 6 teaspoonfuls of lemon juice are sufficient for each quart. After infants weigh approximately 10 pounds, the likelihood of intolerance to whole or evaporated milk formulas is negligible. Consequently, at this time it is my preference to change to a diluted evaporated milk type of feeding. The most common error in infant feeding is the use of over-concentrated evaporated milk formulas. It is wise to remember that it requires 1.2 ounces of water to 1 ounce of evaporated milk to make a dilution equivalent to whole milk. Darrow's, Cooke's and Segor's[8] recent report clearly shows the importance, especially during hot weather, of adequate dilution of cow's milk formulas and the advantage of adding small quantities of carbohydrate to cow's milk preparations.

In my opinion, proprietary low protein milk preparations have too narrow a threshold of safety to be recommended. Protein requirement is very important, not only the quantity but the quality. Another factor to keep in mind is that the protein requirement is also closely related to the need for some of the B group of vitamins. Niacin and pyridoxine are known to be closely related to tryptophan metabolism. The actual protein requirement of the artificially fed infant is not known. Adequate data are not yet available on the response of artificially fed infants receiving protein levels comparable or slightly higher than those obtained in breast feeding. It is the practice of the majority of pediatricians and the recommendation of most authorities to supply a generous intake of protein for the artificially fed baby and to supply in cow's milk formulas at least 3.5 gms. per kilogram body weight per day. Convincing evidence should be available before this recommended level of protein is lowered. No evidence has accumulated to indicate that protein fed at this level is harmful to infants. The pattern of growth of infants fed this level of protein does not differ significantly from the growth of breast fed infants when both groups are receiving daily 400 units of vitamin D.[9] It is obviously possible for healthy infants to subsist and to grow on special infant food supplying 2.7 to 3.0 grams of protein per kilogram per day. Very limited growth data have been published on infants receiving this lower level of protein intake. The early addition of other protein foods, especially sieved meats, may be protective to infants receiving formulas with lower protein content. It is also more necessary to keep in mind the effect of heat and storage when considering low protein milk preparations. Numerous studies[10, 11, 12] have shown that autoclaving protein with lactose, dextrose and other reducing sugars can lower the nutritive value of the protein. First, a peptide carbohydrate linkage which cannot be split by human intestinal enzymes can be formed. The higher the heating and the carbohydrate: protein ratio, the greater the linkage. Second, some essential amino acids, especially lysine but also methionine, tryptophan, arganine, histidine and valine, can be lost under extreme conditions of heating. Third, it also has been shown that after heating certain compounds may be formed which may increase the requirement for other nutrients such as vitamin B_6 or pyridoxine. Recent studies have shown that there is no serious loss of protein nutritive value from heat employed in the commercial manufacturing of evaporated and dried milk.[13] Terminal sterilization of formulas in hospital, if performed under prescribed conditions, has been reported to cause no significant changes in the nutritive value of formulas prepared from evaporated and pasteurized cow's milk as measured by rat growth and rat repletion methods.[14] However, terminal sterilization in hospitals is not always a well controlled procedure. Storage also increases the loss of nutritive value. Cook and associates[15] have found that dried skimmed milk loses some of its biologic efficiency during storage. Therefore, if canned heat treated or dried stored milk products are used as a base for infant feeding, it is necessary to provide a more liberal protein intake.

SUPPLEMENTS

Milk from a healthy mother who has had a good diet meets all the nutritional needs of her infant in the early months of life with the possible exception of vitamin D. The various relationships of the components of human milk, including the calcium to phosphorus ratio, are such that calcium and phosphorus are more efficiently utilized from human than from cow's milk. Rickets is less common among breast fed than among artificially fed babies. Nevertheless, breast fed babies sometimes develop rickets, and the calcium and phosphorus retention of babies receiving human milk is increased when vitamin D is given. The requirement of the breast fed baby for vitamin D is not known accurately, but it is common practice to advocate 400 units of vitamin D daily. During the early weeks after birth I prefer to give the baby a concentrated vitamin D preparation which can be administered as drops into the baby's mouth. The mother must be cautioned to use only the number of drops prescribed, as there is a tendency for them to believe that, if a little is good, more would be better.

The infant fed human milk does not need added vitamin C as early as the artificially fed infant provided the mother's diet has a liberal supply of vitamin C. However, vitamin C is a harmless safeguard for the breast fed infant, and it is good pediatric practice to give the infant small supplements of orange juice beginning in the early months after birth.

Too often administration of vitamin D and, in the case of artificially fed babies of vitamin C, is delayed even into the second month. When the vitamins are started, the amount of vitamin D is often too great and the amount of vitamin C too small. Maximum calcium and phosphorus retentions are obtained with 300 to 400 units of vitamin D daily. Not only are retentions no greater with any larger amount, but the use of 1,800 units or more daily for several months decreases appetite and, as a consequence, reduces the total retentions of calcium and phosphorus and slows linear growth.[16] Vitamins C and D should be started with the introduction of artificial feeding. The infant or child taking daily a can of evaporated milk or a quart of fresh milk fortified with 400 units of vitamin D is receiving his requirement of vitamin D. One ounce of orange juice (15 mg. of vitamin C) is sufficient for infants to 3 months of age.

Overdosage with fat soluble vitamins A and D can and does occur and should be avoided. The toxic level of vitamin A is not known, but is much higher than that of vitamin D. Nevertheless, acute toxicity has occurred from overdosages of vitamin A. Amounts of vitamin A equivalent to five times the vitamin D dosage may be added to the vitamin A content of the feeding with impunity as far as the effect on growth, development or appetite of infants is concerned. Recent studies at the University of Iowa show that 750 units of vitamin A is sufficient to permit normal growth; 1,500 units of vitamin A produces serum vitamin A levels of more than 40 mcg., and no higher serum levels were obtained with a dosage more than 5,000 units of vitamin A.[17]

The requirements of the full term infant for calories, protein, calcium and phosphorus, sodium, potassium, water, riboflavin and vitamin A will be met when the breast fed infant receives 2 to 2½ ounces of milk per pound, and the infant fed cow's milk gets 1½ to 2 ounces per pound of body weight of milk containing 6 to 8 per cent added carbohydrate. The requirements for thiamine and niacin are probably met. Additions of foods containing iron and thiamine are desirable by 3 months or soon thereafter.

IRON

Hypochromic anemia continues to occur commonly in the latter half of the first year of life. It it desirable to prevent rather than to treat hypochromic anemia. The amount of iron storage at birth depends on the adequacy of the mother's diet, the length of gestation and the watchfulness of the obstetrician that the umbilical cord not be clamped until pulsations cease, so that the baby receives the maximum amount of blood possible. Iron is stored in the liver of the fetus during the latter half of the third trimester, and the amount is influenced considerably by the nutritional status of the mother. Inasmuch as the amount of iron stored is related directly to the length of gestation, infants born prematurely or immaturely have less iron storage. It has been shown that if the umbilical cord is not clamped until pulsations cease approximately 100 ml. of blood will enter the infant's body. This amount of blood will make available approximately 45 mg. more iron for storage. This amount of iron may seem insignificant, but it approximates the amount of iron in the diet of many an infant during the first six months of extra-uterine life.

After 5 to 6 months of age, the hemoglobin value reflects the dietary regimen and incidence of infection. Hypochromic anemia most commonly occurs in infants receiving excessive amounts of milk and insufficient amounts of solid foods. It is wise to begin the addition of iron containing foods at the time when the infant reaches his minimum hemoglobin level, and that time is about 3 months of age. The common iron containing foods fed to young infants, egg yolk and green vegetables, provide 1 to 2 mg. daily at most. The sieved meats provide 0.5 to 1.7 mg. to the ounce. Many of the special infant cereals have iron added in amounts providing 2½ to 4 mg. to the serving of ⅓ ounce. The infant born at term of a healthy well fed mother will maintain a good hemoglobin level at least up to 6 months of age. If he receives some iron containing foods daily after the fourth month of life, probably no other iron supplements are necessary. An infant receiving only the iron of milk generally shows a slow decrease in hemoglobin level during the latter half of infancy. If his original iron store is poor, an iron deficiency anemia will occur in late infancy. However, in view of the many variables involved in determining the iron available to the infant and the difficulty in evaluating each variable, it seems wise to advocate the addition of 5 mg. of iron daily to infants 3 to 6 months of age and 10 mg. daily to the older infant. In a recent study we found that the ferrous iron permitted significantly higher hemoglobin values in well infants than did ferric iron. It is often stated that iron is not absorbed when given in milk or with meals high in phytates or phosphates. The small amount of ferrous iron used in our study was added to the milk, and satisfactory hemoglobin responses were obtained.[18] Schulman, Smith and Stern[19] have shown in a recent study that there is no advantage in giving iron prophylactically to prematurely born infants before the third or fourth month after birth. Iron after the third or fourth month becomes very essential and is well utilized.

THIAMINE

The thiamine content of human milk varies widely, being dependent on the mother's diet; the average value is low, 0.13 mg. to the quart. Cow's milk contains 0.38 mg. to the quart, but its thiamine is partially destroyed by heating, so that an infant fed a diluted milk formula may get little more than the breast fed infant. The minimum requirement is considered to be 0.24 mg. per 1,000 calories, so the average thiamine intake must be considered as barely adequate. It seems desirable, therefore, that the earliest fed supplementary foods be those contributing thiamine as well as iron to the infant diet. Therefore, adding egg yolk at about the third month of life is advised.

SOLID FOODS

Solid foods should be introduced to the infant in the third or fourth month after birth. Earlier introduction has become popular in the last few years but serves no useful purpose and may be harmful in conditioning the infant against taking solid foods later when they are necessary to meet known nutritional needs. Egg yolk in the form of a soft custard provides a suitable preparation for the infant's first solid food. Sieved meats especially prepared for babies can be substituted for the egg yolk if there is definite family history of allergy. There is an advantage in giving sieved vegetables and fruits early to provide variety in flavor and texture. The most important advice to give the mother is that the baby probably will show little desire for new foods the first few times they are offered.

Although nutritional knowledge has increased rapidly, there is evidence that present knowledge is incomplete. Varieties of fruits, vegetables and meats would seem to offer better opportunity for mixed assortment of food sources than the more limited varieties of cereals used in infant feeding. Cereal feedings should not be large nor be offered more than once a day.

As the baby becomes older, it is desirable gradually to offer the solid foods in a coarser form. At approximately 5 months of age, the baby should be offered also some of his milk from a small glass or cup, and weaning should proceed gradually over a long period of time. The continuance of bottle feeding after the first year is not good feeding practice under ordinary circumstances.

In recent years the most common problem for which older infants and children are brought to the pediatrician is anorexia. This symptom usually is dependent upon faulty training in feeding habits during infancy. The interrelationships which are set up between mother and child during the early days and weeks of life set a pattern which is important for the later development of the child. The mother who nurses her baby establishes an intimacy with her child which makes future relationships with him easy and natural. This is one of the major advantages of breast feeding, which recently has been stressed by many authorities. Too often a definite volume of food is prescribed by the physician, and the conscientious and solicitous parents endeavor to give this exact quantity of food at each feeding regardless of possible variations of appetite. Rebellion against food most frequently has its beginning in this manner. Self demand feeding schedules have been advocated to overcome this difficulty, but common sense is required by the parents in using such a schedule, because too frequently the baby is fed every time he cries, which again leads to faulty feeding habits. In other words, either extreme, too rigid a schedule or no schedule, can easily lead to difficulties. The emotional health of the parents to a great extent determines the likelihood of a feeding problem arising in the infant. There is no simple or uniform manner to avoid these difficulties. Physicians' responsibility in proper feeding of infants includes treatment of the parents. It is for this reason that one encounters a healthy infant who is not thriving on a nutritionally adequate diet which has had many minor alterations by a conscientious physician. The problem is not the tolerance of the formula by the infant, but rather the adjustment of the parents in taking care of their baby.

FEEDING OF CHILDREN

The nutritional management of infants has received much greater attention by doctors and parents than nutritional management of children past infancy. Vitamin D, calcium, protein and the B

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group of vitamins are commonly found deficient.

Without vitamin D children vary widely in their ability to use calcium and phosphorus. From 300 to 400 units of vitamin D daily will produce adequate retention of these minerals. Except for therapeutic purposes and to supply vitamin D, no known need exists for special vitamin preparations in the feeding of healthy children. Too often excess vitamins are provided as pharmaceutic products. The same money spent for milk and meat would make the diet more adequate.

Calcium is the mineral most likely to be deficient since other essential minerals are more likely to be present in most diets. Milk and milk products are the best sources of calcium. Milk, however, should not be considered solely as a source of calcium as it contributes most importantly to the requirement of protein as well as other essentials. During the period when the calcium requirement is less, the requirement for protein is more. Therefore, it is advisable to give 1 to 1½ pints of milk after the period of infancy to the age of approximately 10 years, and a quart or more during the period of the pre-pubescent spurt.

Protein deficiency is much more common than is generally appreciated. The height and weight of the child is not a criterion for judging protein metabolism. Without the inclusion of milk in the diet, the protein requirement of the child cannot be met unless special and expert supervision is given. A quart of milk daily supplies most of the protein need of the young child and half the need at the beginning of adolescence. One of the criteria which may be used for estimating the protein content of the body is the creatinine output in the urine. Creatinine excretion is directly proportional to the amount of muscle in the body. When children are fed ample protein, the creatinine excretion rises to a constant level for each child, with a narrow range at each age period for a group of children.[20] Creatinine data collected from the literature, as well as data from our studies at the University of Iowa, show that the great majority of children studied have creatinine values below the theoretically normal curve when they first come under observation. In all the instances in which observations have been made the creatinine output increases promptly to the normal level when amounts of protein are fed which are consistent with what are considered standard dietary allowances. There is considerable evidence that nutrition, especially during childhood, is an important factor in the genesis and severity of rheumatic fever.[21] Nutritional studies do not consistently show a deficiency in any single component of the diet. However, the diets are inadequate in a number of essential elements. Although no single component of the diet consistently has been shown to be deficient, all of the major studies show a low or marginal protein intake.

Meat, particularly pork and the glandular organs, and eggs are good sources of the B group of vitamins. A child who drinks his allowance of milk receives most, if not all, of his requirement of riboflavin. Consequently, if the child is receiving a good intake of protein from milk, meat and eggs, the likelihood of deficiency of the B group of vitamins is negligible.

Vitamin B preparations are used commonly for their effects on appetite. Anorexia in children is a common symptom for which medical advice is sought. Correcting the environment and faulty feeding habits usually is the answer to the problem rather than prescribing vitamin B.

Deficiencies in the diet frequently arise because sugar in the form of candy, soft drinks, other confectionary foods and refined cereal products replace nutritionally valuable foods in the diet. Replacing candy and soft drink machines with protective food and milk dispensers would greatly improve the nutritional status of children. The vicious practice of selling confectionary foods, especially in schools, to finance activities should be discouraged.

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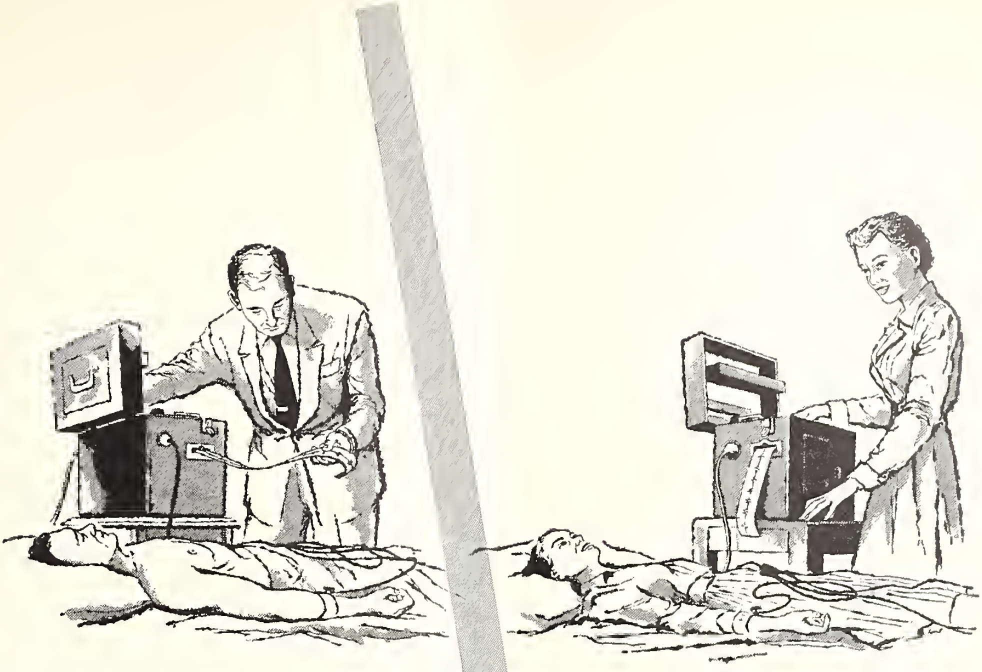

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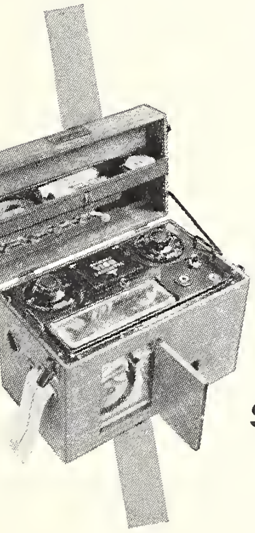

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Case Report

Redundant Ileocecal Fold

Strangulated in a Right Femoral Hernia

J. W. THOMPSON, M.D., and G. M. BUSTAMANTE, M.D., *St. Louis*

ABDOMINAL VISCERA are frequently found in femoral hernial sacs. Among the most common contents of the femoral sac are omentum, alone or together with small intestines. Small intestines alone are seldom found unless strangulated.[1] Also enumerated are the colon, cecum, Meckel's diverticulum, appendix, bladder and sigmoid. The rarer contents mentioned are ovary, fallopian tube, uterus, testicles, gallbladder and liver. In 1920, Ahrens[2] reported incarceration of the stomach in a femoral hernial sac. Seawell[3] reported an undeveloped kidney in a left femoral hernial sac. Chevier[4] mentions two cases wherein a loop of the round ligament entered the ring beside the hernial sac. Petri[5] encountered endometriosis in the sac.

The following is a case of redundant ileocecal fold found in a right femoral hernia, an extremely rare occurrence, warranting its report.

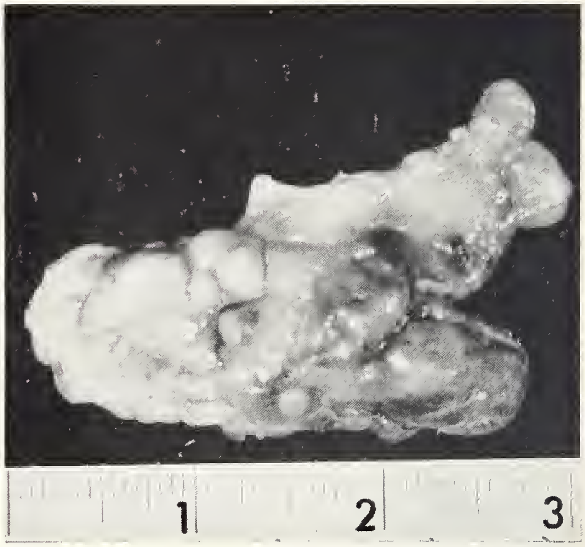
REPORT OF CASE

Mr. O. K., 69 year old white male, was admitted to DePaul Hospital complaining of a tender, irreducible mass at the right inguinal region. On May 15, 1952, he underwent a surgical repair of a right indirect inguinal hernia. He recovered uneventfully. Three months later, he noticed a vague swelling in his right groin which did not bother him in any way. A year later the lump became persistent, attracting his attention to it. He observed that the mass was appreciably larger on straining or bearing down effort and reduced in size on recumbent position, although never entirely disappearing. For the last few days prior to admission, the mass progressively became tender. There was no accompanying nausea or vomiting.

Physical Examination: The patient was fairly well built, fairly nourished, cooperative and in no acute distress. General physical examination was normal except for a globoid mass measuring 6 cms. in diameter over the right femoral ring area which was fairly soft and tender. The mass was located below the inguinal ligament and lateral to the pubic spine. The abdomen was soft. There was no palpable abdominal mass. Bowel sounds were present and normal.

Laboratory Examination: Red blood count was 4,390,000; Hgb., 12.6 grams; white blood count, 14,000; 69 segments, 27 lymphocytes, 3 monocytes, and 1 basophilic. Urinalysis, normal.

Operation: A diagnosis of right femoral hernia, probably incarcerated, was made. The following day the patient was operated on under general anesthesia. An incision was made directly over this mass, which revealed a semi-gangrenous and edematous sac. On opening the sac, a mass of friable, gangrenous fatty tissue was exposed, and what appeared to be the tip of the appendix was observed. Therefore, the abdomen was opened through a low right rectus incision of the Kaemmerer type, retracting the muscle laterally. The object in the femoral sac proved to be a portion of a redundant ileocecal fold. This was withdrawn into the abdominal cavity and removed. The appendix was found to be dilated at its middle portion. The entire serosal surface contained tortuous, congested vessels. The appendix was removed in the usual manner by ligation and inversion of the stump. The femoral ring was then sutured with Dulox catgut from within the abdominal cavity, effectively closing it over. The abdominal incision was then closed routinely. The procedure was subsequently returned to the femoral region and the redundant gangrenous portion of the sac was excised, the opening narrowed down with interrupted cotton sutures, bringing the pectineus fascia and muscle to Poupart's and Gimbernats' ligaments, avoiding excessive pressure on the femoral vessels. The incision was then closed in layers.



Redundant ileocecal fold. The tissue distal to the constriction is swollen and gangrenous.

Postoperative Course: The patient was given Dicrysticin. He developed hiccoughs on the first postoperative day, which were relieved by CO_2 and O inhalation. Otherwise the entire postoperative course was uneventful. The patient was discharged on the seventh postoperative day, recovered and improved.

Pathologic Report: Specimen consists of a triangular mass of adipose tissue covered by thin peritoneum,

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(G. M. B.) Resident in Surgery, DePaul Hospital, St. Louis.

measuring 7.5 by 6.5 by 4.5 cms. Three cms. proximal from the tip of the apex, there is an indented mark, forming a constriction. The tissue distal to this constriction is edematous, friable and gangrenous and presents bluish punctate spots. Cut surface of this area shows a dark hemorrhagic appearance. Also submitted is the appendix measuring 7 by 1.3 cms. The middle third of the appendix is markedly distended by soft fecal material.

Microscopic examination of the triangular mass of adipose tissue. shows the adipose tissue to be largely replaced by dense, fibrous tissue containing hemorrhage and congested vessels. The surface is partially covered by fibrin. The vessels are thick walled. There is diffuse infiltration of the tissues with lymphocytes and large mononuclears.

Histopathologic Diagnosis: Ileocecal fold, strangulation.

COMMENT

Senile atrophic changes, loss of fat in the femoral canal and increase in lower abdominal pressure, are some of the factors enhancing the development of acquired femoral hernia. In this particular case, the history of a previous inguinal hernia repair possibly could have been an added factor. As mentioned by Mueller,[6] the use of the inguinal ligament in the repair of inguinal hernias produces traction to this structure, which forms the roof of the femoral canal, and which may cause sufficient enlargement of the canal leading to herniation.

In this case, the abdominal incision was clearly necessitated by the markedly swollen and friable portion of the ileocecal fold which was caught in the hernal sac. As shown after the abdominal incision was done, effective excision of the redundant gangrenous tissue and the appendix, the tip of which was wedged in the opening, could not have been carried out without entailing unnecessary risk.

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Special Article

Arrastogenic Disease

A New Diagnostic Category

RICHARD R. GRAYSON, M.D., *Perryville*

THE RECENT interest in iatrogenic disease (produced by the physician) has bypassed an important category of disease: That which is produced by the patient himself. It is the purpose of this essay to define the limits of this new diagnostic category, to name it, and to cite examples of its manifestations.

DEFINITION

Arrastogenic (αρρωστος the sick; γενος: born from) disease is a category of factitious signs and symptoms unknowingly produced by the patient. It is to be differentiated sharply from malingering, occupational disease, psychosomatic disease and therapeutic misadventures.

CASE REPORTS

Ankle Edema

Case 1. V. P., a 70 year old retired machinist, was under hospital care for a bleeding peptic ulcer complicated by angina pectoris. On the fifth hospital day, at a time when the patient was progressing satisfactorily, he complained of swelling of the ankles. Two-plus pitting edema was noted up to the knees. Complete investigation revealed none of the usual causes for dependent edema. The same evening, however, the patint was seen eating his meal sitting on the edge of the bed with his feet dangling. When he was instructed to relieve the pressure at the popliteal spaces by resting his feet on a foot stool, the edema promptly disappeared.

Abdominal Pain

Case 2. J. G., a 28 year old mother of a 2 month old baby, complained of severe, nonradiating epigastric pain which lasted from twenty minutes to one hour and had occurred almost daily for the last four months. There was no relationship to meals and no selective dietary intolerance. Physical examination was unrevealing. After detailed questioning of the patient, it was discovered that she had been receiving three 5 grain tablets of ferrous sulfate daily for the last four months. Instead of taking the medication three times a day after meals as directed, the patient had been accustomed to swallowing all three at once, usually before the mid-day meal. When the iron medication was stopped, the patient's abdominal distress vanished.

Burning Tongue

Case 3. W. M., a 72 year old retired businessman, complained of constant burning of the tip of the tongue. Examination of the tongue was unrevealing. Several office visits later, the symptom was still present. At that time it was noticed that the patient was constantly flicking his tongue against his palate and upper incisors. When he was asked about this, the patient stated it was a habit he had developed since he was taking Artane for his parkinsonism. The Artane made his mouth dry and the dryness compelled him to pursue this habit, which in turn, constantly irritated the tip of his tongue.

Dermatitis of the "Scratchable" Areas

Case 4. A severe dermatitis was seen in a 45 year old woman which was unlike anything the dermatologist had seen before. The diagnosis, suggested when it was noted that parts where the patient could not scratch (e.g., between the scapulae) there were no lesions, was corroborated when the patient stated that there were worms crawling under her skin, and was confirmed when the psychiatrist made the diagnosis of schizophrenia.

Periorbital Edema

Case 5. Mrs. E. W., a 70 year old patient who had suffered a mild episode of cerebral thrombosis one year before, was seen frequently because of a feeling of pressure in her head, dizziness, crying spells, stiffness in the left leg and many other neurotic symptoms. Complete medical work-up on several occasions revealed only a residual left hemiparesis. On several occasions she complained of swelling about the eyes. The periorbital tissues indeed were swollen and slightly reddened. The cause of this became evident when it was observed that the patient rubbed her eyes frequently because they "were dry." Actually, it was just a nervous habit, and the constant trauma to the thin, aged skin produced the edema.

DISCUSSION

This is not intended to be an exhaustive presentation of the diagnostic category, arrastogenic disease, but rather is intended to be a brief introduction into a new concept of disease about which apparently nothing has been written heretofore. No references to this concept have been found in the available medical literature. All the recent furor and clamor over the new concept of "iatrogenic" disease has laid the blame for many diseases on the doorstep of the long suffering practitioner. Let us be fair to ourselves, therefore, and allow the patient to accept his share of the responsibility in this new search for exact etiologies of diseases, physical signs and symptoms.

No doubt once physicians begin thinking about signs and symptoms unknowingly produced by their patients, they will add a large number of cases to the few illustrative ones reported here from my own practice. Eventually, it might be seen that arrastogenic disease is just as important as iatrogenic disease.

SUMMARY

A new concept and a new word are introduced. The concept is that of disease, physical signs or symptoms unknowingly produced by the patient.

The word is "arrastogenic," meaning, "produced by the patient." Arrastogenic disease is to be differentiated from psychosomatic disease, malingering, occupational disease and therapeutic misadventures.

Medical Arts Bldg.

The assistance of Reverend Leo Ebisch, St. Marys Seminary, Perryville, in devising the word arrastogenic is gratefully acknowledged.

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President's Page

A legislative proposal of vital interest to members is now being considered by the Committee on Ways and Means of the U. S. House of Representatives. Representatives Keogh of New York and Jenkins of Ohio have sponsored House Resolutions 9 and 10, which provide for an income tax deduction for the self employed who purchase approved retirement programs.

A physician may set aside a sum not to exceed $7,500 annually, or 10 per cent of his earnings, whichever is greater. He would be required to purchase an approved retirement program maturing at age 65. The annual premium would be deductible from federal income tax. The income received at 65 from the invested funds would then be taxable at the usual federal rates applying at the time.

Passage of this legislation, long urged by the American Medical Association, the American Bar Association, the American Farm Bureau Federation and others, will correct an inequity in the federal tax laws. At present, corporations may deduct from taxes amounts paid in to insurance or trust companies for pension plans for their employees. Thus, workers in industry receive the benefits of this tax deduction because they do not have to report it as income until they begin to receive their pensions.

Mr. Thomas B. Curtis and Mr. Frank M. Karsten, Missouri Congressmen, are members of the House Committee on Ways and Means. Letters may be sent to them at House Office Building, Washington, D. C.

Does this interest you, Doctor?

Hunter M.D.

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EDITORIALS

Disability in Social Security

A legislative proposal to amend the Social Security Act so that totally and permanently disabled persons will be paid cash benefits during the period of disability has been approved by the Committee on Ways and Means of the U. S. House of Representatives. This proposal follows the action taken last year when the so-called "disability freeze" program was adopted.

The "disability freeze" provided that persons who are disabled would have their social security benefits frozen during their disability even though no contributions were paid into the social security fund by them or their employers. Disabilities are based on examinations made by physicians.

The new proposal authorizes cash to be paid out of social security funds to anyone more than 50 years of age who is disabled. This proposal can only result in increased regimentation of the medical profession. Why? Because doctors determine whether or not persons are disabled. The next step will be free medical care for those disabled.

If members are opposed to this, a letter should be sent to your Congressman and U. S. Senator, House or Senate Office Building, Washington, D. C. United States Senators are Thomas C. Hennings, Jr., and Stuart Symington. Representatives are: 1st District, Frank M. Karsten; 2nd, Thomas B. Curtis; 3rd, Mrs. John B. Bullivan; 4th, George H. Christopher; 5th, Richard Bolling; 6th, W. R. Hull; 7th, Dewey Short; 8th, A. S. J. Carnahan; 9th, Clarence Cannon; 10th, Paul C. Jones; 11th, Morgan M. Moulder.

T. R. O'Brien

Doctors Draft Extension—1955

The special doctors draft act, originally passed at the time of the Korean episode, has been extended for two more years during these times of peace. The act took effect July 1, 1955, and will expire June 30, 1957. Thus, while all other citizens are subject to draft through the age of 26, physicians, dentists and veterinarians are subject to draft through the age of 45.

Two changes are made in this new extension. It no longer applies to doctors over 46 years of age (formerly 51), nor to those 35 or over who at any time have been rejected for a military commission as a physician in one of the Armed Forces solely on the grounds of their physical condition.

The American Medical Association vigorously opposed the draft extension and made the following points at the hearings: (1) previously submitted Defense Department figures to the House Armed Services Committee fail to back up needs for extending the draft, (2) its continuation cannot be justified except as means of replacing career officers who are leaving in large numbers, (3) set up a joint military-civilian committee to work out an effective officer procurement program.

The position of the American Medical Association was well pointed out in the *Journal of the American Medical Association* of May 21, page 191.

T. R. O'Brien

Natural or Synthetic Estrogens

Huggins and his associates in 1941 reported estrogen therapy of value in the treatment of carcinoma of the prostate. Although estrogen action is not completely understood it is thought to either neutralize or suppress the androgen supply of the patient with carcinoma of the prostate. From the beginning the synthetic oral estrogens largely took over the field of therapy in this disease probably because of their ease of administration and their relative lower cost to the patient. The question arises, are they as effective as the natural injectable estrogens? I believe not. I do not wish to imply that natural estrogens are a cure-all for carcinoma of the prostate, for there are many unanswered questions relative to this disease. Further study on the seventeen-ketosteroids in relation to the adrenals and possibly the pituitary may enlighten further.

The differential diagnosis of primary carcinoma of the prostate and primary carcinoma of the seminal vesicles when the one has invaded the others' structure is indeed difficult to make. Could the lack of estrogen therapy response in certain cases of carcinoma of the prostate be due to the fact that the invading carcinoma was primary in the seminal vesicle and therefore not of the estrogen responsive type?

It is in the true estrogen responsive type of prostatic carcinoma with metastasis in which the evaluation of natural injectable estrogens can best be demonstrated. Take a given case in which synthetic estrogens have proven of early dramatic value but later the patient regresses and begins a hopeless downhill course in spite of continuous synthetic therapy. Now continue the oral synthetic product, but in addition give twenty thousand units of natural estrogen daily for one week. Then continue the same dosage weekly thereafter. In a majority of cases I believe it will be agreed that the natural product is superior to the synthetic if one has occasion to first demonstrate it in this manner.

Martyn Schattyn, M.D.

Legislation in the 68th General Assembly

Following the close of the 68th General Assembly on May 31, the bills which had passed the Assembly still awaited review by the Governor. Most of this has been done and the final status of bills which were of interest to the Association and the medical profession with final action are reported.

LEGISLATION PASSED

Senate Bill 59. Passed by legislature, deals with voluntary and involuntary commitment of patients to mental hospitals. Section 26 which dealt with right of director of mental diseases to require reports from private hospitals was eliminated from act. This section was opposed by the Association.

Senate Bill 60. Passed by legislature, provided for a commission of five persons, three of whom shall be physicians skilled in treatment of nervous and mental diseases; the Commission to appoint the director of the division of mental diseases. This was vetoed by the governor.

House Bill 73. Passed by legislature. Provided for State Civil Defense Agency. The original bill provided for state control over natural disasters such as floods, tornadoes; however, as amended in the Senate, the finally passed bill eliminated the control over natural disasters. Atomic or war actions are covered. The Association favored the more inclusive control.

House Bill 202. Passed. Authorizes the State Department of Education to be responsible for determinations of disability under the "Disability Freeze" provisions of the Federal Social Security Act. The Federal act provides that the social security benefits of totally and permanently disabled persons are frozen during the period of such disability. The reason the Department of Education is selected is because that department now handles the vocational rehabilitation program dealing with the physically handicapped.

LEGISLATION DEFEATED

House Bill 86. Reported "Do Not Pass" by House Committee on Public Health, was an effort to make it unlawful to create a joint licensing board.

House Bill 185. Defeated in House Committee on Public Health, provided for changes in the Chiropractice Act. The course in chiropractic is extended to four years and applicants for a license shall be examined in chemistry, bacteriology, diagnosis, x-ray interpretation, embryology, histology and neurology.

House Bill 186. Defeated in House Committee on Public Health, changed definition of chiropractic as follows: Chiropractic is the art and science of palpating the spinal column; diagnosing, and the adjusting of the movable segments of the spinal column and tissues adjacent thereto by hand. It shall include the use of such supplementary measures as light, heat, electricity, cold, air, water, dietics, rest, and exercise.

House Bill 339. Defeated in House Committee on State Offices, repeals the office of coroner and creates in lieu thereof a state board of medicolegal examiners and provides for a system of medicolegal examiners who would be responsible for setting up methods for determining the cause of death as defined under the act.

House Bill 441. Defeated in House, provided that Naturopaths shall be licensed by the State Board of Medical Examiners. Any person who can establish by record or affidavit that he has practiced Naturopathy for three years in this state shall be licensed. Naturopaths shall confine their activities to the practice of physiotherapy, diagnosis and nutritional biochemistry.

House Bill 243. Dealt with Optometry providing a new definition of optometry as well as other provisions dealing with corporate practice. Amendments, accepted by the House, removed objections of M.S.M.A. to act. This bill did not pass in Senate.

House Bill 457. Defeated in House Committee on Governmental Reorganization, created a division of registration in the Department of Commerce consisting of all examining and licensing boards, including State Board of Medical Examiners. It provided that the director of the Department of Commerce shall be the director of each of the boards and shall be the secretary of each of them. He would be responsible for employing all personnel and have the full and sole power to make inspections and ot see that the statutes are enforced. No examining board shall elect its own secretary, nor employ any person. When a vacancy occurs on any of the examining boards, the Governor shall appoint a layman thereto, who has never practiced the profession involved.

House Bill 562. Defeated in House Committee on Judiciary, created a special appeals board, appointed by the Governor, composed of the presiding judge of the Supreme Court and two other members, one of whom shall be a member of the profession of the person filing the appeal. Any person denied the right to be examined for a license to practice or after examination is denied a license may, within 20 days, file an appeal and the above special appeals board shall consider the matter. The board shall then be bound by the decision of the special appeal court. There is a provision whereby the members of the regular examining board may be guilty of a misdemeanor and subject to damages.

House Bill 374. Defeated in the House on final passage, related to immunity to suit of any person, corporation or institution of the state when liability insurance is carried, then immunity to suit is waived to the extent of the insurance carried.

House Bill 393. Defeated in the House on perfection, dealt with the same subject matter as H.B. 374 and further spells out that any type of organization organized for benevolent, charitable, religious, educational or scientific purposes shall be required to give the name of the liability insur-

(Continued on page 678)

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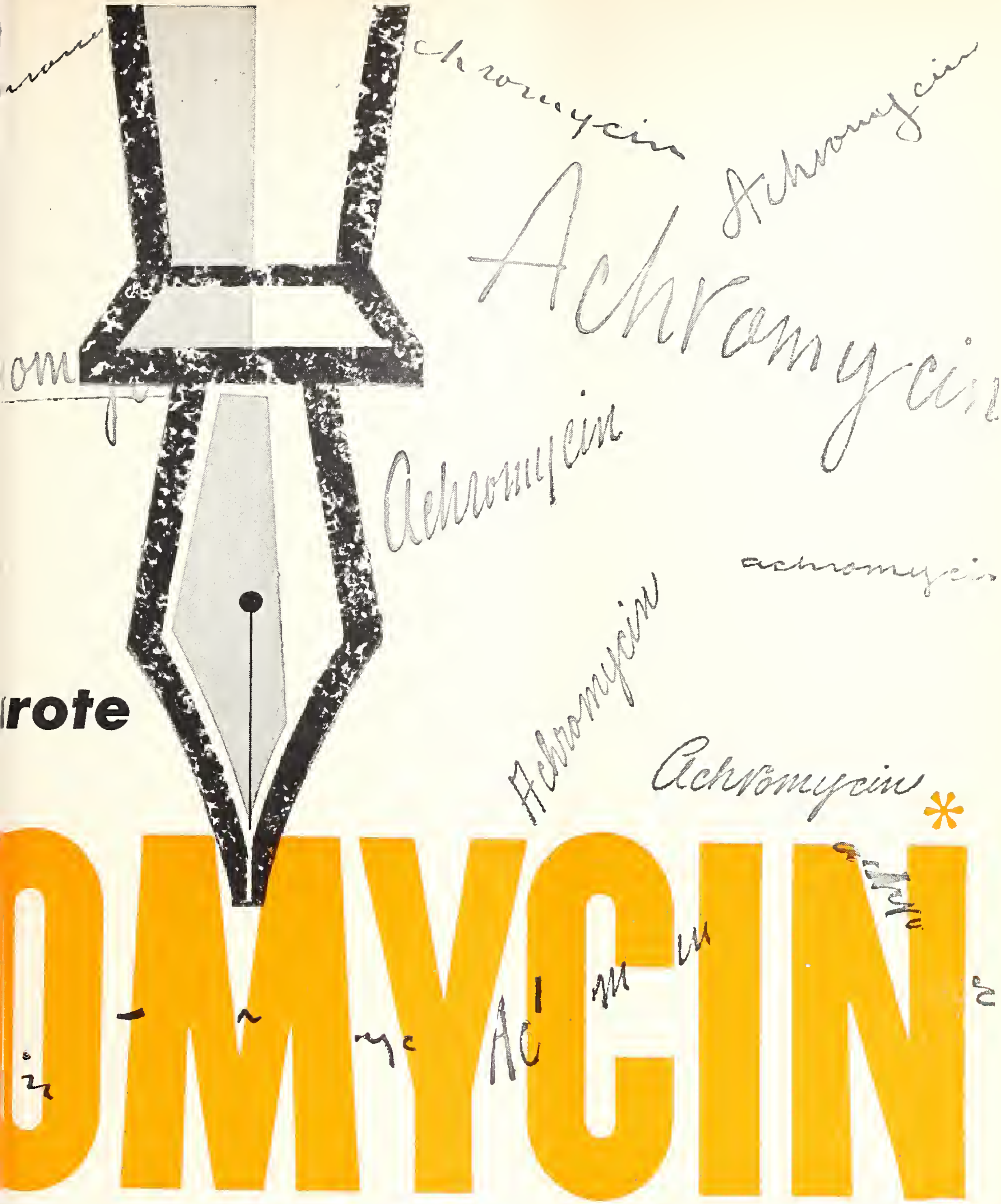
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Missouri Medical Meetings

Missouri Academy of General Practice, Annual Meeting, Governor Hotel, Jefferson City, Oct. 26-27, 1955.
Missouri State Medical Association, St. Louis, April 8-11, 1956.
St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.
Barton-Dade County Medical Society—third Wednesday of each month.
Benton County Medical Society—meets only on call.
Boone County Medical Society—first Tuesday of each month.
Buchanan County Medical Society—first Wednesday of each month.
Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.
Callaway County Medical Society—third Thursday of each month.
Cape Girardeau County Medical Society—first Monday of each month.
Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.
Clay County Medical Society—last Tuesday of each month.
Clinton County Medical Society—meets only on call.
Cole County Medical Society—first Monday of each month.
Cooper County Medical Society—first Monday after the 15th of each month.
Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.
Dunklin County Medical Society—first Tuesday of each month.
Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.
Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.
Greene County Medical Society—fourth Friday of each month.
Henry County Medical Society—meets only on call.
Holt County Medical Society—meets only on call.
Howard County Medical Society—meets only on call.
Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.
Jasper County Medical Society—second Tuesday of each month, September through May.
Jefferson County Medical Society—meets only on call.
Johnson County Medical Society—meets only on call.
Laclede County Medical Society—second Monday of each month at 6:00 p.m., at the Louise Wallace Hospital, Lebanon.
Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.
Lewis-Clark-Scotland County Medical Society—meets only on call.
Lincoln-St. Charles County Medical Society—third Thursday of each month.
Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p.m.
Miller County Medical Society—meets only on call.
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.
Moniteau County Medical Society—second Thursday of each month.
Newton County Medical Society—meets only on call.
Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.
North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.
Pemiscot County Medical Society—third Thursday of each month.
Perry County Medical Society—second Thursday of each month.
Pettis County Medical Society—third Monday each month September through May.
Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.
Pike County Medical Society—third Tuesday of each month.
Platte County Medical Society—meets only on call.
St. Louis County Medical Society—second and fourth Wednesday of each month.
St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.
Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.
South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.
Vernon-Cedar County Medical Society—meets only on call.
Webster County Medical Society—meets only on call.
West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

The Grand River Medical Society officially came into being in September of 1951. The secretary of the society elected at that time was Dr. E. A. Duffy of Trenton. Members of that virile society apparently feel that they have the right man in the right job, for Dr. Duffy is still their secretary and going strong at the age of 76. His experience as a medical society secretary goes far, far back. He served as secretary of the Grundy-Daviess County Medical Society for many years prior to its hyphenation into the Grand River Society in 1951. Although caring for a large daily practice, Dr. Duffy finds time somewhere to see that his local medical society functions effectively in line with established policy.

In this column, a short time ago, another unusually efficient local society secretary, Dr. A. C. Ames of Mountain Grove, who has served long in that capacity, was brought to your attention.

It might seem, after noting the interest and service manifested by these two perennial secretaries along with their effectiveness, that medical society secretaries improve with age and length of office. Maybe, it's a bit like holding a political office—it takes time to determine the score, or get-on-to the ropes, or get into your blood.

Dr. Duffy, secretary for many years, reads the minutes at a Society meeting.

The 3rd Annual School Health Education Workshop was held at the Central Missouri State College, Warrensburg, June 13-16. School administrators, teachers, school and public health nurses, health officers, P. T. A. representatives, physicians, voluntary health organization personnel, dentists, nutritionists and college faculty personnel met together for two and one half days to consider ways and means of building more health responsibilities in school communities.

Ninety-six people were present to take part in the deliberations of the workshop. In addition to planned formal talks and panel discussions, those attending were divided into small groups for the informal consideration of special selected school health problems. Each group discussion was guided by a previously selected leader and had assigned to it certain individuals acting as consultants who possess special knowledge related to the subject under investigation. Through this means of group activity, the combined experience and knowledge of the group members were pooled toward the solutions of the problems presented.

It became quite evident, after listening to some of the group discussions, that there are a number of school health problems still needing varying degrees of attention in Missouri. The stumbling block seems to be in stimulating more interest on the part of more people in a particular local community, to cooperatively diagnose these problems and then institute proper therapy.

A number of physicians in private practice took part in various discussions on the workshop program. They were: Dr. C. G. Stauffacher, Sedalia; Dr. A. E. Spelman, Smithville; Dr. T. Reed Maxson, Warrensburg, and Dr. William L. Mundy, Kansas City.

The workshop was most fortunate in having as a consultant throughout its two and one-half days, Dr. Donald A. Dukelow, Consultant in Health Fitness, Bureau of Health Education, of the A.M.A. His contribution added much to the success of the workshop.

On June 21-23, the first Health Education Workshop was held at Southeast Missouri State College at Cape Girardeau. The program was patterned after that held at Warrensburg the preceding week.

Some seventy-five people, representatives of the same groups present at Warrensburg, participated in this effective first attempt health workshop at Cape. Doctors appearing on the program were: Dr. Guy N. Magness of University City; Dr. C. T. Herbert, Cape Girardeau; Dr. Emmett Hoctor, Farmington; Dr. Sandford Cockrell, Independence, and Dr. William O. L. Seabaugh, Cape Girardeau.

One important point that was stressed at both workshops was—the health of the school age child is primarily the responsibility of the parents.

The State Medical Association's Committee on Infant and Child Care was represented on the program planning committees for both workshops.

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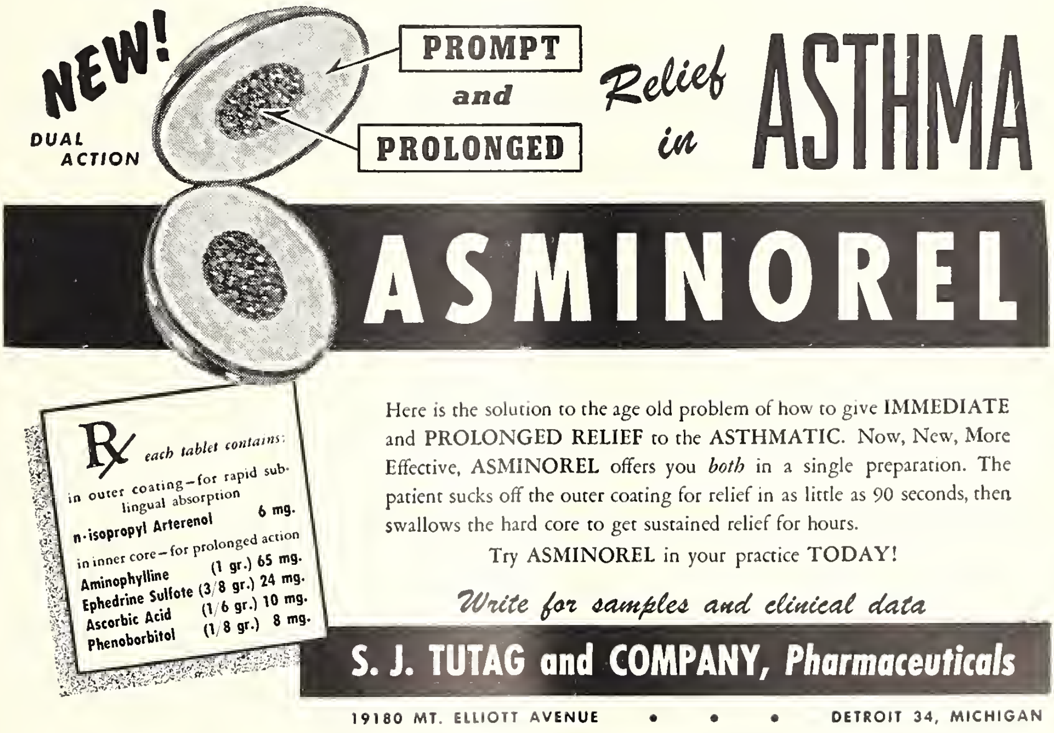

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Members in the News

The Missouri Public Health Association, at its annual meeting in May, installed **Ralph E. Duncan**, M.D., Kansas City, as president.

At an all day Children's Mercy Hospital Clinical Day, held May 19, **Harry M. Gilkey**, M.D., Kansas City, presided at the morning session, and **Frank S. Hogue**, M.D., Kansas City, at the afternoon session.

At a sponsors rally for a hospital at West Plains on May 5, **Curtis H. Lohr**, M.D., St. Louis, was the principal speaker.

On June 3, the family and friends of **D. I. L. Seabaugh**, M.D., Jackson, met in celebration of his fiftieth anniversary in the practice of medicine. The *Southeast Missourian* of June 7 carried an article about the meeting and about Dr. Seabaugh.

A merit award from Northwestern University was presented **Roscoe L. Pullen**, M.D., Columbia, one of twenty alumni awards given by the university at an alumni banquet on June 11.

Participating in the program of the American Goiter Association in Oklahoma City on April 28-30 was **Robert W. Bartlett**, M.D., St. Louis.

The fifth annual memorial lecture of the Menorah Medical Center, Kansas City, was presented by John C. Leonard, M.D., Hartford, Conn., on May 23.

Taking part in a symposium on "Medical Aspects of Traffic Accidents" at Montreal, Canada, on May 5, **Paul W. Miles**, M.D., St. Louis, spoke on "Can Vision Research Decrease Traffic Accidents?" Dr. Miles served as chairman to the Midwest Section of the Association for Research in Ophthalmology at the Mayo Clinic on April 30.

The sixth annual Dr. F. G. Thompson, Sr., lectureship was given in St. Joseph on May 19 by Walter C. MacKenzie, M.D., Alberta, Canada.

Among awards for outstanding service to medicine and to Homer G. Phillips Hospital, made by the hospital Interns Alumni Association on May 6, was one to **A. N. Vaughn**, M.D., St. Louis.

At a meeting of the American College Health Association, held in Colorado Springs, April 28-30, **George X. Trimble**, M.D., Columbia, took part in the program.

"Still 'Doctoring' at 75" is the heading of an article in the *Kansas City Star* on May 8 about **George W. Carpenter**, M.D., Chillicothe.

Speaker at the Moberly Kiwanis Club in May was Thomas H. Alphin, M.D., Columbia, who spoke on the new medical school at the University of Missouri.

The Katz memorial lecture, sponsored by Phi Delta Epsilon, Washington University medical fraternity, was presented on May 9 by **William A. Sodeman**, M.D., Columbia.

Recently elected officers of the Kansas City Surgical Club include **Thomas M. Johnson**, M.D., president; **Richard A. Twyman**, M.D., secretary-treasurer, and **E. A. Wilkinson**, M.D., and **Frederick J. McCoy**, M.D., members of the executive committee.

Appointment was recently announced of **James R. McVay**, M.D., Kansas City, to a special committee of the American Medical Association to meet with labor and management in a joint effort to solve the medical problems of working people.

At the annual meeting of the Guild of Catholic Psychiatrists on May 10 in Atlantic City, **G. Wilse Robinson, Jr.**, M.D., Kanssas City, was elected president.

The Rotary Club of Kansas City installed **Lawrence P. Engel**, M.D., Kansas City, as president on May 26.

The National Association of Private Psychiatric Hospitals, at a meeting in Atlantic City on May 8, elected **Paul Hines**, M.D., Kansas City, as vice president, and **G. Wilse Robinson, Jr.**, M.D., as secretary.

Speaker at the graduation exercises of the Kansas City General Hospital School of Nursing on May 10 was **Carl R. Ferris**, M.D., Kansas City.

"Surgical Resection for Ulcer" was the subject of a talk by **Richard A. Twyman**, M.D., Kansas City, before a meeting of the Greater Kansas City Association of Medical Record Librarians on May 18.

Participating in dedication ceremonies of the Queen of the World Hospital, Kansas City, on May 19, were **William C. Mixson**, M.D., chief of staff, and **Samuel U. Rodgers**, M.D., secretary of staff.

Appearing on a radio program over St. Joseph KFEQ on June 5, discussing "First Aid" were Drs. **Wilbur P. McDonald**, **E. F. Butler**, **M. H. Christ**, **J. R. Forgrave**, **J. L. Mothershead** and **William B. Rost**.

"Management of the Hypertensive Patient" is the title of an exhibit which **Joseph C. Edwards**, M.D., St. Louis, will present at the Post Graduate Fortnight of the New York Academy of Medicine in October. He showed the exhibit at the recent American Medical Association session.

The new Noll Memorial Hospital, Bethany, held open house on May 14 and 15, which more than 2,000 attended.

Appointment of **Ned D. Rodes**, M.D., Mexico, as chief surgeon of the Ellis Fischel State Cancer Hospital, Columbia, was made recently.

The Greater Kansas City Academy of General Practice named **Robert M. Myers**, M.D., Kansas City, general practitioner of the year at a meeting on May 19.

The Unicity Club of Flat River had as speaker on May 26 **Jack Mullen**, M.D., Bonne Terre, who spoke on polio.

The American Gastro-Enterological Association, at a recent meeting in Atlantic City, named **Robert Elman**, M.D., St. Louis, as president.

The resignation of **Carl V. Moore**, M.D., St. Louis, as dean of Washington University School of Medicine, was announced recently. Dr. Moore will become head of the department of medicine and Busch professor of medicine at the school.

"Cerebral Palsy and the Family Physician" was the subject of a talk presented by **R. E. Bruner**, M.D., Kansas City, before the Henry County (Iowa) Medical Society, Mt. Pleasant, on May 17.

The *Sikeston Herald,* of May 12, reported a meeting of the Semo County Medical Society in honor of five men who had practiced fifty years, including a picture and information about the physicians.

New officers of the medical staff at Menorah Medical Center, Kansas City, are **Cecil M. Kohn**, M.D., president; **Jacob S. Hoffman**, M.D., president-elect; **Jacob Zellermayer**, M.D., secretary, and **Bela K. Kent**, M.D., treasurer.

Speaker at the April meeting of the Greater Kansas City Association of Medical Record Librarians was **Robert K. Skillman**, M.D., who spoke on "Blood Dyscrasias."

In celebration of his 81st birthday, friends of **George A. Mellies**, M.D., St. Louis, gathered for a reception at his home on June 25. Among congratulatory messages was one from President Eisenhower.

"Radiation Treatment of Carcinoma of the Urinary Bladder" was the subject of a paper presented by **Samuel B. Chapman, Jr.**, M.D., at the annual meeting of the American Radium Society held in April.

Appearing on the program of the spring meeting of the Southwest Missouri Chapter, American College of Surgeons, at Springfield on June 29 were Captain James H. Harrison, M.D., Camp Crowder; **Charles E. Lockwood**, M.D., **William W. Wood**, M.D., **Durward G. Hall**, M.D., **William H. Snead**, M.D., **Daniel L. Yancey**, M.D., **Edwin M. Powell**, M.D., and **William F. Johnson**, M.D., Springfield; **Norman H. Barnett**, M.D., and **Virgil E. Jeans**, M.D., Joplin. Alton Ochsner, M.D., New Orleans, was the guest speaker at the meeting.

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Deltasone*

requires only 1/5 the dose of cortisone

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Among speakers at the ninth annual Rocky Mountain Cancer Conference held at Denver on July 13 and 14 were **Louis T. Byars**, M.D., and **Wendell G. Scott**, M.D., St. Louis.

NEW MEMBERS

Barnett, Norman H., M.D., 701 First National Bank Bldg., Joplin. Jasper County.

Blankenship, Dale M., M.D., 800 S. Third St., Troy. Lincoln-St. Charles County.

Bronson, Shael S., M.D., 813 Missouri Theatre Bldg., St. Louis. St. Louis Medical Society.

Broun, Goronwy O., Jr., M.D., 1325 S. Grand Blvd., St. Louis. St. Louis Medical Society.

Carroll, Thomas W., M.D., 1204 Gulf St., Lamar. Barton-Dade County.

Chinsky, Murray, M.D., 3734 Jennings Rd., St. Louis. St. Louis County.

Colbert, James W., Jr., M.D., 1402 S. Grand Blvd., St. Louis. St. Louis Medical Society.

Ebel, Eugene H., M.D., 10011 Bellefontaine Rd., St. Louis. St. Louis County.

Eubank, David F., M.D., Raytown Clinic, Raytown. Jackson County.

Faw, Melvin L., M.D., Kansas University Medical Center, Kansas City, Kansas. Jackson County.

Gardiner, David G., M.D., 600 New Federal Bldg., St. Louis. St. Louis County.

Goldenberg, Sidney, M.D., Pasteur Medical Bldg., St. Louis. St. Louis County.

Grant, Murray, M.D., Clay County Health Dept., Liberty. Clay County.

Graves, F. Burton, M.D., Frisco Bldg., Joplin. Jasper County.

Hahn, Andrew L., M.D., 915 N. Grand Blvd., St. Louis. St. Louis County.

Hanna, Richard E., M.D., 5535 Delmar Blvd., St. Louis. St. Louis Medical Society.

Harper, Fleming B., M.D., 600 S. Kingshighway Blvd., St. Louis. St. Louis Medical Society.

Inouye, Taskashi, M.D., 208 E. High St., Jefferson City. Cole County.

Jackson, Laurence S., M.D., 410 Jackson Ave., Joplin. Jasper County.

Lampe, Elfred H., M.D., 630 S. Kingshighway Blvd., St. Louis. St. Louis Medical Society.

Lipschitz, Ervin, M.D., 101 S. Meramec, Clayton. St. Louis County.

Lund, Robert H., M.D., 600 S. Kingshighway Blvd., St. Louis. St. Louis Medical Society.

Maffei, Rudolph J., M.D., 1515 Lafayette Ave., St. Louis. St. Louis Medical Society.

May, Albert L., Jr., M.D., 330 N. Second St., Poplar Bluff. Butler-Ripley-Wayne County.

Meyer, Dexter, Jr., M.D., 520 Metropolitan Bldg., St. Louis. St. Louis Medical Society.

Miller, Harold, W., M.D., 600 E. Second St., Willow Springs. South Central.

Norval, Mildred A., M.D., 6035 Westminster Pl., St. Louis. St. Louis Medical Society.

Rainey, Robert, M.D., 4905 Lindell Blvd., St. Louis. St. Louis Medical Society.

Ramey, Ehret O., M.D., 4635 Wyandotte St., Kansas City. Jackson County.

Reister, Philip D., M.D., 915 N. Grand Blvd., St. Louis. St. Louis Medical Society.

Reynolds, Clarence C., M.D., 201 N. Third St., Columbia. Boone County.

Rother, Paul H., M.D., 114 N. Main St., St. Charles. Lincoln-St. Charles County.

Rumer, Donald G., M.D., 915 N. Grand Blvd., St. Louis. St. Louis Medical Society.

Rush, Joseph C., M.D., 1515 Lafayette Ave., St. Louis. St. Louis Medical Society.

Sawyer, Floyd E., M.D., 329 Armour, North Kansas City. Clay County.

Spitze, Edward C., M.D., Benjamin Franklin Hospital, Columbus, Ohio. St. Louis County.

Stein, Arthur H., Jr., M.D., 600 S. Kingshighway Blvd., St. Louis. St. Louis Medical Society.

Streeter, Ralph T., M.D., 7717 Walinca, Clayton. St. Louis County.

Thomas, Christopher Y., M.D., 315 Nichols Rd., Kansas City. Jackson County.

Tibbs, William A., Jr., M.D., 5560 Pershing Ave., St. Louis. St. Louis Medical Society.

Tietjen, Frederick O., M.D., 213 Jackson St., Jefferson City. Cole County.

Weyrens, F. P., M.D., 207 N. Fifth St., St. Charles. Lincoln-St. Charles County.

Windsor, Richard B., M.D., 5535 Delmar Blvd., St. Louis. St. Louis Medical Society.

DEATHS

Vinyard, Robert, M.D., Springfield, a graduate of Washington University School of Medicine, 1915; member of the Greene County Medical Society; aged 65; died May 4.

Shouse, Edwin, M.D., Lawson, a graduate of the University Medical College of Kansas City, 1899; honor member of the Lafayette-Ray County Medical Society; aged 79; died May 5.

Lowry, Henry L., M.D., Tindall, a graduate of Barnes University Medical College, 1904; honor member of the Grand River Medical Society; aged 87; died May 5.

Schulz, A. P. Erich, M.D., St. Charles, a graduate of Washington University Medical School, 1912; honor member of the Lincoln-St. Charles County Medical Society; aged 74; died May 7.

Evans, Ezra L., M.D., Springfield, a graduate of Marion Sims Medical College, 1895; honor member of the Greene County Medical Society; aged 88; died May 12.

Kirk, John S., M.D., St. Joseph, a graduate of the University of Kansas School of Medicine, 1950; member of the Buchanan County Medical Society; aged 47; died May 23.

Lee, A. E., M.D., Illmo, a graduate of the University of Arkansas School of Medicine, 1933; member of the Semo County Medical Society; aged 49; died June 3.

Reid, Charles Thomas, M.D., Joplin, a graduate of St. Louis University School of Medicine, 1911; honor member of the Jasper County Medical Society; aged 81; died June 4.

Stamey, James T., M.D., St. Joseph, a graduate of Central Medical College, St. Joseph, 1897; honor member of the Buchanan County Medical Society; aged 83; died June 20.

Nifong, Frank G., M.D., Columbia, a graduate of Washington University School of Medicine, 1889; Past President of the Missouri State Medical Association; honor member of the Boone County Medical Society; aged 88; died July 5.

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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Grand River Medical Society

The Grand River Medical Society met May 12, 1955, Strand Hotel, Chillicothe. There was a good attendance of both members and Auxiliary members and a few pharmaceutical representatives present.

The scientific program was presented by Dr. **W. R. Hepner**, Associate Professor of Pediatrics, Medical School, Columbia, who discussed "Perinatal Problems." This was an interesting and scientific paper followed by questions and discussion.

The minutes of the last meeting were read and approved.

There being no further business, the meeting was adjourned.

Meeting of June 9

The Grand River Medical Society met June 9, 1955, Strand Hotel, Chillicothe. Some twenty-five members were present, eighteen Auxiliary members, six pharmaceutical representatives and a few guests. About fifty enjoyed the fine dinner. After dinner, the guests were introduced. The ladies then retired to their meeting, following which the scientific program was presented.

Dinner for members and the Auxiliary preceded the meeting.

Dr. Marks gave the scientific program.

The speaker, Dr. **Mark M. Marks**, Kansas City, was introduced by the chairman of the Program Committee, Dr. **Charles M. Grace**. Dr. Marks' subject was "The Management of Common Proctologic Disorders." It was an excellent scientific paper, well presented and illustrated with slides. Questions and discussion followed.

Ray McIntyre, Field Secretary, was present, and we were glad to have him with us.

Our Annual Golf Tournament was held in the afternoon at the Chillicothe Country Club. Dr. **C. L. Clark** won the trophy, Dr. **Joseph Conrad**, the highest score, and Dr. **John Martin**, the least number of putts.

A vote of thanks was extended to Dr. **V. D. Vandiver** for the excellent service rendered by his local committee in charge of arrangements.

The minutes of the last meeting were read and approved.

E. A. DUFFY, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

W. F. FRANCKA, HANNIBAL, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

The Chariton-Macon-Monroe-Randolph County Medical Society held its regular monthly dinner meeting at the Woodland Hospital in Moberly on Thursday night, May 12.

Dr. **Clarence D. Davis**, Professor of Obstetrics and Gynecology at the University of Missouri, Columbia, was the guest speaker. He spoke on "Amenorrhea." Dr. Davis was accompanied by Dr. **W. T. Ellis**, Assistant Professor of Obstetrics and Gynecology.

Twenty-three members and guests were in attendance.

W. D. CHUTE, M.D., *Secretary*

Marion-Ralls-Shelby County Medical Society

The Marion-Ralls-Shelby County Medical Society and the corresponding Dental Society held a dinner meeting at the Mark Twain Hotel on Thursday night, May 19. As guests, the doctors and dentists had their wives, their office secretaries and assistants and husbands.

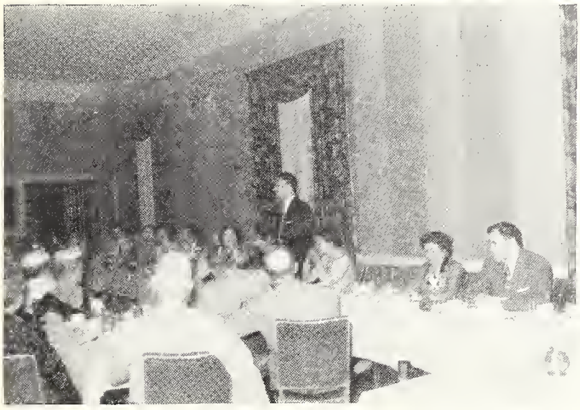
Some seventy people enjoyed a pleasant evening ushered in by a social hour followed by a delicious smorgasbord and the formal program.

The Medical-Dental Assistants and Secretaries Society of the three counties serves the purpose of aiding its members in improving their work in the doctors' and dentists' offices, particularly in the various aspects of public relations.

Mrs. Mary Kay Shell and Mr. Shell, Fayette, were guests on this occasion. Mrs. Shell is the immediate past president of the Missouri State Medical Secretaries and Assistants Society. She made a few brief remarks quite suitable to the occasion.

After various guests were recognized, Dr. **R. J. Lanning,** President of the Marion-Ralls-Shelby County Medical Society, called upon Dr. **Wyeth Hamlin,** Palmyra, Chairman of the Program Committee, to introduce the speaker of the evening. Dr. Hamlin introduced Mr. Stephen T. Donohue, Assistant Director of the Department of Public Relations of the A.M.A. In his remarks, Mr. Donohue effectively pointed out the great value to the doctor and dentist of the services performed by the competent office assistant and secretary.

In addition to other guests mentioned, Mr. and Mrs. T. R. O'Brien and Mr. Ray McIntyre of St. Louis were also present.



Mr. Donohue of the A.M.A. addressed the meeting.

Members and guests had dinner together.

FRANCIS BURNS, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

JOSEPH C. CREECH, TROY, COUNCILOR

Lincoln-St. Charles County Medical Society

A meeting of the Lincoln-St. Charles County Medical Society was held Thursday night, May 26, at the St. Charles Hotel in St. Charles.

A social hour preceded the dinner and program. The

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scientific presentation of the evening was given by Dr. **E. H. Parsons**, St. Louis, who discussed "Tactical Practices in Office Psychiatry." An interesting discussion period followed Dr. Parsons' formal talk.

A social hour preceded the dinner.

Informal discussion closed the evening.

Twenty-three doctors attended the meeting.

Wm. H. Poggemeier, M.D., *Secretary*

St. Louis County Medical Society

On Wednesday evening, May 25, the St. Louis County Medical Society held its Annual Spring Banquet at the

The banquet was well attended.

Le Chateau Restaurant on Clayton Road just west of Lindbergh Boulevard.

Over 100 people attended the banquet, including doctors, their wives and special guests.

The speaker chats with members

Guests and members were seated at small tables.

Officers and speaker were seated at the head table.

A social hour with all the trimmings initiated the evening's festivities. A delicious steak dinner was served, and then all were privileged to enjoy a talk by Mr. Joseph Holland, General Counsellor of Pevely Dairy.

After conclusion of the formal part of the program, a period of dancing was ushered in.

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Bumbalo, T. S., Gustina, F. J., and Oleksiak, R. E.:
J. Pediat. 44:386, 1954.

White, R. H. R., and Standen, O. D.:
Brit. M. J. 2:755, 1953.

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"Ninety per cent of the children passed all of their ascarides . . ."

Brown, H. W.:
J. Pediat. 45:419, 1954.

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Dr. **Louis F. Howe**, president of the society, presided over the evening's activities.

GEORGE J. L. WULFF, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

J. LOREN WASHBURN, VERSAILLES, COUNCILOR

Audrain County Medical Society

A dinner meeting of the Audrain County Medical Society was held at the county hospital in Mexico, on Monday night, May 16.

The scientific program for the evening, which was sponsored by the Missouri Academy of General Practice, was presented by Dr. **A. W. Neilson**, St. Louis. He discussed "The Management of Common Skin Diseases." This was a most practical and informative presentation, which was illustrated by a group of excellent colored slides.

Fifteen doctors were in attendance.

Meeting of June 20

The June meeting of the Audrain County Medical Society was held on Monday evening, June 20, in the cafeteria of the Audrain County Hospital in Mexico.

The meeting was called to order by the president, Dr. **Ben N. Jolly**. The minutes of the previous meeting were then read and approved. Dr. Jolly then introduced the speaker for the evening, Mr. William Head, St. Louis Branch Manager of Sharp and Dohme, who showed a movie on Cylaine for both office and hospital usage in local anesthesia. The movie showed the indications, technic and dosage for this local anesthetic.

Fourteen doctors and guests attended this meeting.

THOMAS L. DWYER, M.D., *Secretary*

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

Henry, Johnson, Pettis and Saline and Adjacent County Medical Societies

Fifty-four people, including doctors, their wives and guests, attended a joint dinner meeting of the Henry, Johnson, Pettis, Saline and adjacent county medical societies at Warrensburg on Wednesday night, May 18.

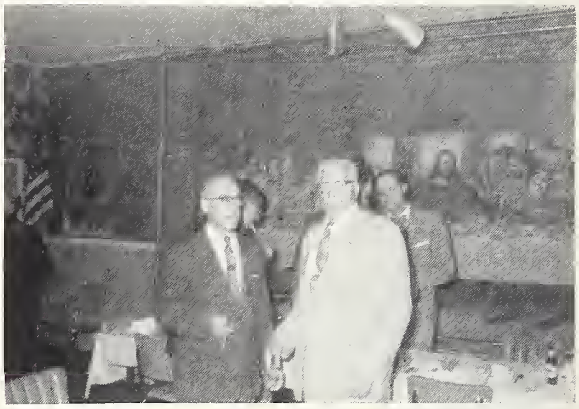
Following an enjoyable social hour, a bountiful dinner was served. The scientific program for the evening was presented by the Missouri Academy of General Practice in cooperation with St. Louis University Medical School.

Doctors and their wives had dinner before the program.

The doctors were interested in the scientific discussion.

The speakers were Dr. **John Meyers**, Dr. **James G. Janney, Jr.**, and Dr. **R. E. Kelly**, St. Louis. They discussed "Recent Advances in the Treatment of Rheumatic Fever."

A special program for the ladies was presented at the Gas Service Company office in Warrensburg, where Miss Juanita Luthi of Kansas City, Kansas, gave a demonstration on home cookery.



Dr. Campbell, Sedalia, and Dr. McBurney, Slater, visited after the meeting.

K. D. JONES, M.D., *Secretary,*
Johnson County Medical Society

West Central Missouri Medical Society

The West Central Missouri Medical Society and its Woman's Auxiliary met at the Nevada Country Club on Thursday night, May 12. Approximately sixty persons were in attendance. The scientific program for the evening was under sponsorship of the Missouri Academy of General Practice and consisted of a panel discussion, "The Management of Gastric Ulcers."

Dr. **L. A. Scarpellino**, Kansas City, discussed the subject in relation to x-ray. Dr. **Wm. A. Slentz**, Kansas City, discussed the medical angle, and Dr. **John A. Griffith**, Kansas City, spoke from the surgeon's viewpoint.

Following dinner, the Auxiliary held a separate meeting. Dr. **W. H. Allen** of Nevada was in charge of the local arrangements for the dinner.

A. L. HANSEN, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

South Central Counties Medical Society

The South Central Counties Medical Society held its regular May meeting at the Horton Hotel in Willow Springs on Wednesday evening, May 25.

Following dinner, the wives of the doctors met at the home of Dr. and Mrs. **M. B. Perkins** in Willow Springs for an Auxiliary meeting.

Guest speakers were Dr. **R. Ned White** and Dr. **Joseph C. Siceluff**, Springfield. Dr. White spoke on "Vaginal Discharges." Dr. Siceluff discussed "Back Pain, Arising From Abnormal Conditions of the Kidneys and Ureters."

Following these practical discussions, the minutes of the last meeting were read and approved.

The application for membership of Dr. H. W. Miller of Willow Springs was presented and referred to the Board of Censors.

The meeting then adjourned to meet in Cabool June 22.

Those attending the meeting were: Dr. and Mrs. **Rollin H. Smith**, Dr. **Jack Wiles**, Dr. **C. F. Callihan** and Dr. **M. B. Fowler**, West Plains; Dr. and Mrs. **M. B. Perkins**, Willow Springs; Dr. and Mrs. **C. W. Cooper**, Thayer, and Dr. and Mrs. **R. W. Denney**, and Dr. **A. C. Ames**, Mountain Grove, and the two speakers and their wives from Springfield.

Meeting of June 22

The South Central Counties Medical Society met for dinner Wednesday night, June 22, at Tiny's Cafe in Cabool with the following members and visitors present: Dr. **R. W. Denny**, Dr. **S. W. Connor** and Dr. **A. C. Ames**, Mountain Grove; Dr. **Garrett S. Hogg**, Cabool; Dr. **M. B. Perkins**, Willow Springs; Dr. **Jack Wiles** and Dr. **C. F. Callihan**, West Plains; Dr. **C. W. Cooper**, Thayer; Dr. **U. J. Busiek** and his son from Springfield, a pharmaceutical representative and the wives of several of the doctors.

After dinner, the ladies went home with Mrs. Hogg for the evening and the men went to Dr. Hogg's office, where a film was shown. Dr. Busiek then spoke on "Osteomyelitis in Children." The application of Dr. H. W. Miller, Willow Springs, presented at the last meeting, was taken up, and he was unanimously elected to membership.

A letter was read from the Division of Health, asking for cooperation in the matter of chest x-rays. The secretary was instructed to reply that such cooperation is freely given.

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The meeting then adjourned to meet at Dr. Cooper's camp on Spring River, below Mammoth Spring, Arkansas, the third Thursday in July for a picnic.

A. C. Ames, M.D., *Secretary*

Mid-Missouri Medical Society

In spite of adverse weather conditions, a large turnout of doctors and their wives, dentists and their wives, nurses, undertakers and others were present at a dinner meeting of the Mid-Missouri Medical Society at Rolla on Thursday evening, May 26.

Carroll P. Hungate, M.D., Kansas City, Chairman of Committee on Emergency Medical Care of the Missouri State Medical Association, was the guest speaker of the evening. Dr. Hungate had been requested to appear at this meeting and tell those present what they should know about atomic bombs—what they should be doing about this matter of civil defense and what state-wide plans had been developed to handle a possible atomic bombing of Missouri.

This was a most informative talk given by Dr. Hungate, and those present were all greatly impressed by his effective presentation.

M. K. Underwood, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Mineral Area County Medical Society

The May meeting of the Mineral Area County Medical Society was held Thursday night, May 26, at the Clinic Building, State Hospital in Farmington.

The program for the evening was furnished by the Eli Lilly Company, showing the Kinescope of the closed circuit TV program of the Francis Report on the Poliomyelitis Salk Vaccine, which is a full length reproduction of the 59 minutes original telecast.

C. E. Carleton, Jr., M.D., *Secretary*

Semo County Medical Society

On Wednesday night, May 4, at the Colonial Inn, Sikeston, the Semo County Medical Society took occasion to pay special honor to five of its members who have completed fifty years or more in the practice of medicine.

Some seventy-five physicians, their wives and guests were present on this gala occasion to pay homage to these five doctors who have given so much to so many.

Dr. Hyman, Memphis, Tenn., gave the principal address.

Doctors honored and officers of the society pose together.

The evening festivities began with a social hour followed by dinner and then the official program.

The five guests of honor were Dr. **T. T. O'Dell,** Oran; Dr. **John H. Roberson**, Lilbourn; Dr. **A. J. Martin,** East Prairie; Dr. **J. A. Cline**, Oran, and Dr. **W. C. Dieckman**, Dexter.

Unfortunately, Dr. Dieckman was unable to be present because of illness in his immediate family. Dr. **W. J. Ferguson**, Sikeston, secretary-treasurer of the society, served as master of ceremonies, in place of Dr. **A. D. Martin**, Sikeston, president of the society, who was unable to be present for all of the meeting.

Informality preceded the dinner.

Before introducing the guests of honor, he read brief autobiographies of the five honored physicians.

An interesting side light arose at the meeting when it was learned that Drs. O'Dell and Martin were members of the same graduating class, and this occasion was the first time they had seen each other since 1896.

Dr. **Ben Bull**, Ironton, Councilor of the 10th District of the Missouri State Medical Association, with Mrs. Bull, was a guest of the local society. He spoke briefly in commendation of the Semo Society in taking this opportunity for honoring these revered members.

The guest speaker of the evening was Dr. O. W. Hyman, Dean of the College of Medicine, University of Tennessee, Memphis. Dr. Hyman used "Postgraduate Medical Courses" as his topic for the evening. He pointed out how the continuous progress of medicine makes it so vitally important that doctors keep abreast of any discoveries, and how to utilize them by continuation of study and attendance at postgraduate medical courses and meetings.

The Semo County Medical Society includes the counties of Scott, Stoddard, New Madrid and Mississippi. All counties were represented at the May 4 meeting.

There were also present physicians and their wives from Cape Girardeau and other towns in the area.

In addition to the many doctors and their wives, there were present members of the Delta Community Hospital board of trustees and their wives and other lay personnel.

W. J. FERGUSON, M.D., *Secretary*

BOOK REVIEW

SPORTS INJURIES, PREVENTION AND ACTIVE TREATMENT, by Christopher Woodard, Honorary Consultant to British Olympic Teams, 1948 & 1952. Max Parrish, London. 1954. Price $3.00.

The many inaccuracies in basic understanding and in particular of pathio-physiologic interpretation found in this book makes it impossible to recommend it for anyone's reading or reference. While in some instances the therapeutic measures recommended are sound, the rationale of the treatment is not understood in the light of known physiology. In other instances of possible serious injury, irresponsible therapy is suggested which could well prove to be dangerous.

J. C. P., Jr.

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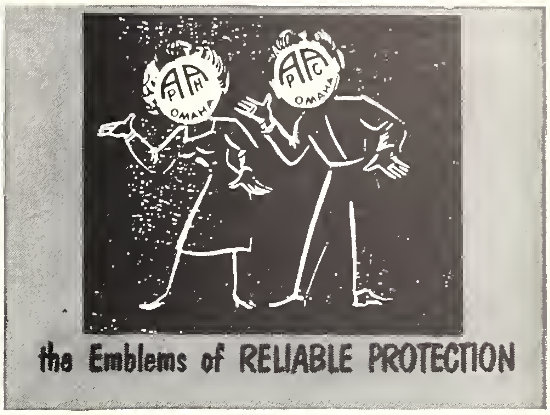
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CODE FOR MISSOURI UNIVERSITY TEACHING HOSPITALS

WHEREAS, The Board of Curators of the University of Missouri has established the University Teaching Hospitals to be operated as a part of and in connection with the Four Year Medical and Surgical School and Medical Center in Columbia, and

WHEREAS, It is the duty of the Board of Curators to provide rules and regulations for the operation of the Teaching Hospitals;

Now, Therefore, Be It Resolved, that the following general code regulating and governing the operation of the University Teaching Hospitals be and it is hereby adopted, effective July 1, 1955:

1. NAME

Said hospitals shall be known and designated as "University Hospitals."

2. PURPOSES

Said hospitals shall be maintained and operated for the purpose of teaching allopathic medicine, nursing, and allied healing arts in the University of Missouri and for conducting research in said fields, and incidental thereto and insofar as the same may be practical, to provide medical assistance for the residents of the State of Missouri.

3. CONTROL OF THE HOSPITALS

The Dean of the School of Medicine of the University of Missouri shall serve as Director of the University Hospitals, and, as such, shall supervise the administration and operation of the University Hospitals, subject to the direction of the President of the University and the authority and control of the Board of Curators. As Director of the University Hospitals, he shall promulgate rules and regulations for the administration and operation of said Hospitals, which rules and regulations shall be in accordance with the policies fixed by the Board of Curators. He may delegate such of his duties as he may determine necessary to those selected by him to act in his stead.

4. PHYSICAL PLANT

Said hospitals shall consist of all buildings erected or to be erected for the diagnosis and treatment of the sick, together with the nurses dormitories, from funds appropriated by the General Assembly of Missouri and from other funds made available for the construction of buildings for the Four Year Medical and Surgical School, together with Noyes Hospital Building (and any other buildings or parts of buildings which now are or may be hereafter designated by the Board of Curators), together will all equipment, supplies, and other personal property used in connection therewith.

5. STAFF

No physician or surgeon shall be permitted to practice in said Hospitals except those who are duly appointed and active members of the faculty of the School of Medicine of the University of Missouri or members of the house staff, provided, however, nothing herein contained shall prevent the Director of the Hospitals from inviting other physicians or surgeons for the purpose of consultation or instruction. Members of the attending staff of the University Hospitals may retain fees for professional services rendered to private patients according to a formula and in accordance with policies set by the Board of Curators, but in no event shall any staff member on regular appointment be allowed to retain an amount in excess of his base salary received from the University.

6. RIGHT TO ADMISSION

Any person requiring medical care who is pregnant or is afflicted with a defect, disease, or deformity presumed curable or improvable by skilled medical and surgical treatment, or needing special study and diagnosis, and who is acceptable to the Director of the University Hospitals as proper clinical patients, may be admitted to said Hospitals, treated therein, and discharged therefrom, under such rules and regulations as may be adopted by the Director of said Hospitals in accordance with the policies fixed by the Board of Curators of the University of Missouri.

The approval of all patients shall be vested in the Director of University Hospitals, and no patient shall be admitted to the hospitals until his admission has been so approved.

All patients admitted to said hospitals of whatsoever class, except those admitted from the Student Health Service, shall agree to be available for teaching purposes and shall prior to admission execute proper release and consent evidencing such agreement.

7. TERMINATION

The Director of the University Hospitals shall in his discretion determine when the patient shall be discharged.

8. CLASSES OF PATIENTS

Patients shall be divided into the following classes:

A. Indigent
B. Part-Pay
C. Private
D. Teaching and Research
E. Emergency
F. Crippled Children
G. Students

A. Indigent Patients

Any person who is a resident of the State of Missouri and has resided within the State one whole year next prior to the application for admission may be eligible for admission as an Indigent Patient, provided:

(a) He is without funds to pay any of the charges of said hospitals, and

(b) The spouse of said person is unable to pay any of the charges of said hospitals, or

(c) If the patient be a minor, the parent, parents, or curator of said minor is unable to pay any of the charges of said hospitals.

To be medically indigent, the individual need not be eligible as a recipient of public welfare, but he shall be considered medically indigent if he is unable through his own or other available resources to provide himself and his dependents with proper medical care without depriving himself and his dependents with the necessities of life. Eligibility for admission as an indigent shall be determined by the Director of the University Hospitals upon rules to be established by the Director and from time to time made available to the public.

Patients may be accepted from other State institutions and may be received as indigent patients.

B. Part-Pay Patients

Part-Pay Patients shall be those patients meeting the qualifications set forth in paragraph A but who are able to pay a part but not all of their charges in said hospitals. They shall be required to pay such part of their charges as they may be able to pay, and in case such patient is entitled to receive hospital benefits under insurance, or from any other source whatsoever, such funds shall be assigned to the hospital to the extent of the charges incurred by such patient.

C. Private Patients

Private patients shall be those patients able to pay the charges in full of hospital services to be rendered.

D. Teaching and Research Patients

Teaching and research patients may be admitted by the Director without charge to the patient or for such charges as the Director may determine, and shall be those patients who are unable to qualify as indigent patients and are desirable as clinical patients, or such patients as may be highly desirable as clinical patients regardless of other qualifications.

E. Emergency Patients.

An emergency patient shall be any person whose medical condition in the opinion of the Director or his authorized representatives requires emergency treatment. These patients may be admitted immediately without recourse to the normal procedure for admission.

Emergency patients shall be kept in the hospital only for the period of the emergency as determined by the Director of the Hospitals, unless arrangements are made to qualify the patient under the general regulations of the hospitals. Any emergency patient shall become obligated for the charges of the hospitals to the extent determined by the Director of the Hospitals.

F. Crippled Children Patients

A Crippled Child Patient shall be any patient qualified to receive treatment under the laws of the State of Missouri applicable to Crippled Children.

G. Student Patients

A Student Patient shall be any patient regularly enrolled in the University of Missouri, including the School of Mines and Metallurgy, who shall be referred to said hospitals by the respective Directors of the Student Health Services, or their authorized representatives. The full costs of the care of such patients as determined by the Director of the University Hospitals shall be borne by funds available to the Student Health Services.

9. METHOD OF OBTAINING ADMISSION

A. General

Any person desiring admission to the University Hospitals shall make application therefore upon a form to be prescribed by the Director of said hospitals. The forms for application for admission shall at all times be available at the Office of Admissions of said hospitals and at some designated place in each county of the State and in the City of St. Louis.

The applicant shall cause to be filed with said application a certificate upon a form prescribed by the Director of said hospitals executed by a physician licensed to practice medicine and surgery, or osteopathy, setting forth the medical condition of the applicant and such other information as may be known to the physician which may be helpful in the treatment of the patient.

If application be made to be admitted as an Indigent or Part-Pay Patient, the applicant shall also file a certificate upon a form prescribed by the Director which shall set forth such information as the Director may require in order to ascertain his eligibility for such classification. The application and the required certificate shall, whenever possible, be forwarded to the Director of the University Hospitals in advance of the date on which admission is requested. The Director shall, in all cases, pass upon the admissibility of the

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applicant as a patient in said hospitals, and shall, as soon as practicable, notify the applicant in writing of his acceptance, subject to classification, or rejection; and, if accepted, subject to classification, the date upon which he may be interviewed and examined. If the applicant is accepted, subject to classification, he shall present himself at the hospital at the place and on the date designated by the Director. The classification of the patient, Indigent or otherwise, will not be determined until after interview and examination of the patient's financial statement.

In cases of emergency, the Director of the Hospitals, or his authorized representative, shall, if possible, be contacted by telephone prior to the applicant being presented to the hospitals, and the Director in all cases of emergency shall have power to modify the requirements for admission to such extent as he shall deem necessary.

In the allocation of hospital beds, the Director shall, insofar as the same does not interfere with the proper operation of the hospitals for teaching purposes, admit and treat at said hospitals during each fiscal year a number of indigent patients (obstetric, pediatric, and institutional patients not included) from each county and the City of St. Louis which shall bear the same relationship to the total number of indigent patients admitted during each fiscal year as the population of each county and the City of St. Louis shall bear to the total population of the State according to the last official census; provided, however, in the admission of this number, the Director shall not be required to accept patients not desirable as teaching patients in order that the quota of each county and the City of St. Louis may be filled, and in accepting patients he shall always have the right to accept and admit the patients which are more desirable for clinical treatment.

An emergency patient shall not be counted against the quota of a county or the City of St. Louis unless, after the passing of the emergency, he shall qualify and be retained as an indigent or part-pay patient as herein provided.

Patients utilizing the clinic or the out-patient facilities shall be exempt from the quota.

B. Patients From Other State Institutions

The University Hospitals may accept public patients from State institutions as indigent patients if the same are acceptable to the Director as teaching patients and receipt of the same will not interfere with the proper operation of the hospitals for teaching purposes. In such cases, the application for admission of the patient shall be made by the Superintendent of the Institution in which the patient is confined, upon forms to be prepared by the Director, to be forwarded in advance of the date on which admission is requested, and shall contain such information as he may require. Any such patient accepted from a State institution shall remain an inmate of such institution, and the institution shall agree to remove the patient from the hospital upon request of the Director of the Hospitals.

C. Crippled Children Patients

Any person qualified for admission to a hospital as a Crippled Child under the provisions of Chapter 201 RSMo, 1949, and amendments thereto, may be received as a patient of the University Hospitals.

D. Private Patients

Private patients will be admitted to the hospitals only on recommendation of a member of the attending staff of the University Hospitals. Before admission a private patient shall be required to make satisfactory arrangements with the Director for the payment of all hospital charges.

Be It Further Resolved that the foregoing code shall generally govern and regulate the operation of said hospitals and that all detailed rules and regulations adopted relating to the operation of said hospitals shall be governed by the general code and in conformity therewith.

COUNCIL

The Council met at the Sheraton Hotel, St. Louis, on June 25 and 26, 1955, W. S. Sewell, M.D., Springfield, Chairman, presiding. Those present were Drs. W. F. Francka, Hannibal; R. O. Muether, St. Louis; Joseph C. Creech, Troy; J. Loren Washburn, Versailles; C. G. Stauffacher, Sedalia; Richard H. Kiene, Kansas City; J. H. Summers, Lebanon; Ben M. Bull, Ironton; Victor B. Buhler, Kansas City; Carl F. Vohs, St. Louis; E. Royse Bohrer, Jefferson City; J. I. Simon, St. Louis; Joseph C. Peden, St. Louis; Durward G. Hall, Springfield; Roscoe L. Pullen, Columbia; Thomas H. Alphin, Columbia; James R. Amos, Jefferson City; Ralph R. Coffey, Kansas City; A. E. Spelman, Smithville; A. P. Rowlette, Moberly; Daniel L. Landau, Hannibal; Henry Allen, St. Louis; Messrs. John W. Noble, Kennett; John Buckner, Springfield; Lemoine Skinner, Ed Schneider, Ray McIntyre, T. R. O'Brien, St. Louis.

SINGLE LICENSURE

Mr. O'Brien reviewed the actions taken on the study of osteopathy by the American Medical Association, the majority report of a reference committee favorable to the Cline report being defeated and a minority report not favorable to it being accepted by a vote of 101 to 81. An analysis follows:

RELATIONS BETWEEN OSTEOPATHY AND MEDICINE

A study has been made of osteopathic colleges by a special committee of the American Medical Association. The following persons were members of the Committee: James Z. Appel, M.D., Pennsylvania; Leonard Larson, M.D., North Dakota; Thomas P. Murdock, M.D., Connecticut; Cleon Nafe, M.D., Indiana, and John W. Cline, M.D., California, Chairman.

Drs. L. R. Chandler, former dean Stanford University School of Medicine; J. Murray Kinsman, Dean of the University of Louisville School of Medicine; W. Clarke Wescoe, Dean of the University of Kansas School of Medicine, were special advisors and assisted the special committee with its on the campus study of the osteopathic colleges.

The recommendations of the Special Committee, embodied in a report covering twenty-five mimeographed pages, and known as the "Cline Report" follows:

RECOMMENDATIONS

1. That the House of Delegates declare that current education in colleges of osteopathy does not constitute the teaching of "cultist" healing.

2. That the House of Delegates declare the policy of the American Medical Association to be to encourage doctors of medicine to assist in osteopathic undergradu-

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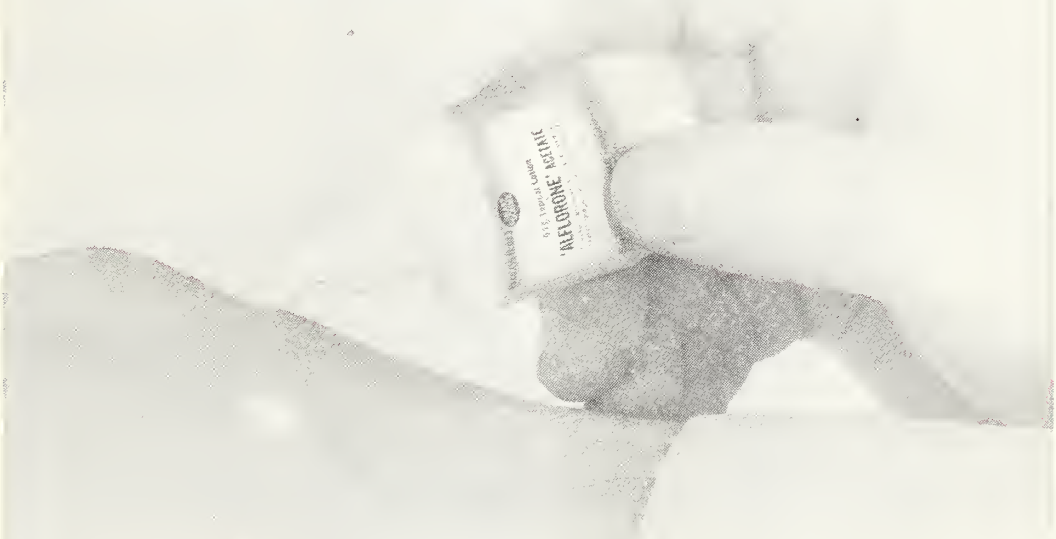

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ate and postgraduate medical educational programs in those states in which such participation is not contrary to the announced policy of the state medical association.

3. That the House of Delegates request state medical associations to assume the responsibility of determining the relationship of doctors of medicine to doctors of osteopathy within their respective states or request their component county societies to do so.

4. That this or a similar committee be continued to confer with representatives of the American Osteopathic Association concerning common or interprofessional problems on the national level.

The report with the recommendations was referred to the Reference Committee on Medical Education and Hospitals of the House of Delegates.

The report of this Reference Committee was made up in two parts, the Majority report and the Minority report.

The Majority report which was approved by 4 of the 5 members follows:

MAJORITY REPORT

"Your Reference Committee after a study of the report of the Committee for the Study of Relations Between Osteopathy and Medicine and the study of other evidence submitted is not completely satisfied that the current education in colleges of osteopathy is free of the teaching of 'cultist' healing.

"In view of the desire to elevate the standards of teaching in colleges of osteopathy, your Reference Committee recommends approval of the recommendation of the Committee that doctors of medicine may accept invitations to assist in osteopathic undergraduate and postgraduate medical educational programs in those states in which such participation is not contrary to the announced policy of the respective county and state medical associations. Such teaching services would be ethical.

"Your Reference Committee approves the recommendation of the Committee that the House of Delegates request state medical associations to assume the responsibility of determining the relationship of doctors of medicine to doctors of osteopathy within their respective states or request their component county societies to do so.

"Your Reference Committee recommends that a committee be appointed at the discretion of the Board of Trustees to confer with representatives of the American Osteopathic Association concerning common or interprofessional problems on the national level."

The minority report was submitted by the one dissenting member of the reference committee.

MINORITY REPORT

"One member of the Reference Committee was completely satisfied that an appreciable portion of current education in colleges of Osteopathy definitely does constitute the teaching of 'cultist' healing, and is an index that the 'osteopathic concept' still persists in current osteopathic practice. Since he cannot with good conscience approve the recommendation that doctors of medicine teach in osteopathic colleges where 'cultism' is part of the curriculum, he respectfully makes the following recommendations to the House of Delegates:

"1) That the report of the Committee for the Study of Relations Between Osteopathy and Medicine be received and filed; and that the Committee be thanked for its diligent work, and be discontinued.

"2) That if and when the House of Delegates of the American Osteopathic Association, their official policy-making body, may voluntarily abandon the commonly so-called 'osteopathic concept,' with proper deletion of said 'osteopathic concept' from catalogs of their colleges; and may approach the Trustees of the American Medical Association with a request for further discussion of the relations of Osteopathy and Medicine, then the said Trustees shall appoint another special committee for such discussion."

ACTION TAKEN

The Minority Report was offered as a substitute for the Majority Report and the House of Delegates accepted it by a vote of 101-81.

It was felt that the question may be reopened at the December session of the A.M.A. It was reported that the Missouri delegates voted 3 for the majority report and 1 against it. It was pointed out that a suit pending in Illinois, and situations in several states neighboring Missouri, may have caused reaction against the majority report. After this was discussed, it was pointed out that the House of Delegates of the Missouri State Medical Association instructed the Council to continue its study toward a single licensure act in Missouri, re-evaluating the situation and bringing to the House new recommendations. On motion of Dr. Washburn, it was voted to re-establish the former committee to continue study of the single licensure act in Missouri.

VA CONTRACT

A request from the Veterans Administration to renew the contract for the home care program which has been in effect since 1947 was presented. Figures for usage of this service were presented. On motion of Dr. Bohrer, it was voted to renew the contract.

MASW HEALTH COMMITTEE

A request that the executive secretary of the Association serve on the health committee of the Missouri Association of Social Welfare was presented. On motion of Dr. Muether it was voted that an individual member or members of the Association be suggested in lieu of the executive secretary.

A.M.A. COUNCIL ON MENTAL HEALTH

A communication from the A.M.A. indicating that a conference on Mental Health would be an annual conference was presented. It was pointed out that the chairman of the Association's committee had attended such a conference at his own expense. On motion of Dr. Bohrer, it was voted that expenses of the chairman, or a representative of the Committee on Mental Health, for attendance at the conference should be paid by the Association.

PHYSICIANS AND SCHOOLS CONFERENCE

On request that attendance for the Field Secretary and chairman and a member of the Committee on Infant and Child Care at the A.M.A. Conference on Physicians and Schools this fall at Highland Park, Illinois be approved; this was voted approval on motion of Dr. Muether.

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A.M.A. LEGISLATIVE CONFERENCE

On request, representation at the Legislative Conference of the A.M.A. was voted approval on motion of Dr. Stauffacher.

ADVISORS FOR PRACTICAL NURSES

A request for medical advisors for the practical nurse groups at Nevada and Lamar was referred to the Councilors of the Districts who named Dr. Pearse for Nevada and Dr. Bickel for Lamar.

STATE LEGISLATION

Mr. O'Brien presented a "final action" report on all bills in the Missouri Legislature in which the Association had been interested. He called attention to House Bills 374 and 393, which would cause hospitals to lose immunity to suit up to the amount of insurance carried. These were defeated and he presented letters from hospital administrators thanking him for the help given by the Association. He called attention to House Bills 457 and 562, both of which would influence the Board of Medical Examiners by creating a department in charge of all boards and also an appeals board and all other boards would be bound by this board's decisions. H.B. 562 led to Senate Resolution No. 106, as follows:

"Whereas, the State Reorganization Commission recommended to this General Assembly that a system of central administration in a single office in Jefferson City be established for fifteen of the state examining and licensing boards; and

"Whereas, the reasonableness of examination and licensing fees of such boards should be inquired into in order to ascertain whether licensees and applicants are being equitably dealt with; and

"Whereas, there is considerable difference in the procedural laws applicable to such various examining and licensing boards; and the regulatory measures and practices of such boards are likewise different; and

"Whereas, because of such differences, there is a lack of uniformity in the procedure before the different agencies and there is serious question as to whether the rights of persons subject to such regulatory laws and regulations are adequately protected in the day to day operations of such various agencies,

"*Now, Therefore, Be It Resolved,* that a committee of the Senate consisting of five members thereof to be appointed by the President Pro Tem of the Senate be created to investigate and study the laws, regulations, organization, practices and operations of the various professional licensing boards with a view to promoting uniformity in procedure, reducing the costs of operation of the various boards, insuring equitable treatment for and safeguarding the rights of applicants; and

"*Be It Further Resolved,* that said committee report and submit its recommendations to the Senate of the 69th General Assembly; and

"*Be It Further Resolved,* that the Committee on Legislative Research be requested to provide such professional and clerical assistance as may be required by the committee; and

"*Be It Further Resolved,* that the expenses of the members of such committee in the performance of their duties under this resolution shall be paid from the contingent fund of the Senate."

The following Senate Committee was appointed: Senators Kinney, Spradling, Gibson, Crain and Hawkins.

Regarding S.B. 255, which failed to pass, Mr. O'Brien pointed out that only in the last day of the session was an amendment which would make it apply to Blue Cross and Blue Shield handled. He said that H.B. 202 was delayed until the use of a Medical Advisory Committee by the Department of Education could be clarified, and Dr. Kiene reported on a meeting on June 12 of the Advisory Committee with the Department, saying that he felt cooperation would be good.

NATIONAL LEGISLATION

Mr. O'Brien told of recent actions of Congress on the cash disability payments under the Social Security Act, and in regard to the extension of the doctor draft act.

ANNUAL SESSION

The proposed outline for the 1956 Annual Session by the Committee on Scientific and Postgraduate Work was presented, as follows:

Monday, April 9, 1956.
10:00 a. m. House of Delegates.
12:00 noon Luncheon with guest speaker.
2:00 p. m. Scientific Session (30 minute intermission).
Tuesday, April 10, 1956.
9:00 a. m. Scientific session.
10:00 a. m. Intermission.
10:30 a. m. Sections on Medicine and Obstetrics.
12:00 noon Round Table Luncheon.
2:00 p. m. Sections on Surgery and Pediatrics.
3:30 p. m. Intermission.
4:00 p. m. House of Delegates.
Wednesday, April 11, 1956.
9:00 a. m. Scientific session.
10:00 a. m. Intermission.
10:30 a. m. Scientific session, panel of CPC.
12:00 noon Open.
1:30 p. m. Wet clinics at Washington and St. Louis Universities.
4:00 p. m. House of Delegates.
6:30 p. m. Annual Banquet.

After discussion by most of the Councilors, on motion of Dr. Muether, it was voted that it be recommended that the same schedule used in 1955 be followed.

TREASURER'S REPORT

Dr. Simon gave the financial statement of the Association and on motion of Dr. Bohrer, this was accepted.

INDUSTRIAL HEALTH

A report of the Committee on Industrial Health, dealing with a Presidential Award for contribution to employment of the handicapped; discussion of the booklet, "A Survey of Union Health Centers," and unemployment compensation and Workmen's Compensation, was presented. On motion of Dr. Muether, the report was accepted.

COMMITTEE APPOINTMENTS

Dr. Buhler gave the following report, which on motion was approved:

"Because of the change in the by-laws, increasing the Committee on Mental Health from five to ten members, that Committee was not appointed for approval of the House of Delegates. The following committee has since been appointed and is submitted for approval of the Council:

"Committee on Mental Health: Thomas Thale, St. Louis, Chairman; G. Wilse Robinson, Jr., Kansas City; Ernest H. Parsons, St. Louis; William J. Cremer, Fulton; Henry V. Guhleman, Jefferson City; John J. O'Hearne, Kansas City; James N. Haddock, St. Louis; Ellsworth H. Trowbridge, Jr., Kansas City.

"Several changes in the Committee on Civil Defense were suggested and the committee is named for approval as follows: Carroll Hungate, Kansas City, Chairman; A. S. Bristow, Princeton; John R. Forgrave, St. Joseph; Curtis H. Lohr, St. Louis; James F. Dowd, St. Louis; William C. Allen, Glasgow; Carl Siegel, Sedalia; Don J. Silsby, Springfield; Samuel A. Grantham, Joplin; George E. Thoma, St. Louis.

"Shortly after the annual session, Dr. C. Souter Smith, Springfield, was elected to the Springfield City Council and retired from the practice of medicine. Thus the chairmanship of the Committee on Conservation of Eyesight was left vacant. Dr. A. N. Lemoine, Kansas City, was appointed chairman, and Dr. W. J. Marshall, Springfield, was appointed to the committee. This is submitted for approval of the Council."

A.M.A. 1955 SESSION

Drs. Peden and Hall reported on the A.M.A. 1955 session, reviewing the discussions before the reference committee on the report of osteopathy; several resolutions dealing with hospital accreditation with a committee appointed to review this; recommendation that usual scientific procedures be followed in the future on the introduction of products such as the Salk vaccine; intern program continuing on the one-fourth rule; forming of a permanent committee on geriatrics; survey of headquarters office which recommended printing be done by a commercial firm.

UNIVERSITY OF MISSOURI MEDICAL SCHOOL

Dr. Pullen showed slides and discussed the progress of the building program of the University of Missouri School of Medicine. He said there were 102 full time people on the faculty and 25 part time. He said since the school had been organized, 100 scientific papers have been published by faculty members and 3 textbooks, as well as the editing of 10 other books. He said thirty-one students will enter the third year of study this fall. Dr. Alphin told of the applications for entrance to the medical school and said the quality of students applying was higher than for the national level. He said that the costs for a student will be held at a minimum.

Dr. Pullen presented the "Code for University Teaching Hospitals" and went over it with the Council, answering questions that were raised. The Code is presented elsewhere in this issue.

On motion of Dr. Vohs, Drs. Coffey, Rowlette and Spelman as chairmen respectively of the standing committees on Medical Education and Hospitals, Medical Economics, and Rural Medical Service were asked to serve as a committee to remain conversant with progress and activity at the Medical School of the University and to bring to the attention of the stand-

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ing committees this information for report later to the Council.

FIELD SECRETARY'S REPORT

Mr. McIntyre reported on hospital building activity throughout the state, giving as hospitals recently opened or additions, those who had raised money and those that were attempting to at the following locations: West Plains, Crystal City-Festus, Cape Girardeau, Richmond, Joplin, Bethany, Albany, Cameron, North Kansas City, Excelsior Springs, Carthage, Sedalia, Hannibal, Marshall, Fulton, Springfield, Smithville. He reported on doctors who had recently located, or would within a short time, in the following Missouri towns outside the two large city areas: Edina, Richmond, Licking, Lebanon, Fairfax, Osceola, Willow Springs, Van Buren, Mexico, Clinton, Jackson, Smithville, Bloomfield, Poplar Bluff, Ironton, Lamar, Farmington, Illmo, Fulton, Pacific, St. James, Albany, Bethany, Cape Girardeau, Joplin, Springfield and St. Joseph.

Society meetings since the annual session were reviewed, as was a meeting of the Missouri Health Council, a workshop on school health at Warrensburg and at Cape Girardeau. He said that the exhibit at the State Fair, August 20-28, would be an A.M.A. exhibit on "You and Your Body."

COMMITTEE ON FRACTURES

Dr. Kiene presented a report of the Committee on Fractures dealing with a conference with the chiropody group on possible future legislation. It included a report of the Trauma Committee of the College of Surgeons which was presented to the Committee. On motion of Dr. Kiene, the report was accepted.

COMMITTEE ON INFANT AND CHILD CARE

Dr. Landau presented a report of the Committee on Infant and Child Care including the following two recommendations by the Committee:

"Having met and discussed all the information available to them to date, the Committee on Infant and Child Care of the Association feels there is not and will not be for some time the information desired for a profound or permanent decision on the safety or efficacy of polio vaccine. From the information available and their own medical knowledge, the potentiality of the vaccine protecting children outweighs its risks in general and they expect this balance to be increased in this direction. The second shots therefore should be given to those desiring. The institution of a new series should be stayed until after the polio known season, as its value and safety when given during this season is sufficiently unknown to justify its use on a mass basis, in a state in which polio is not a problem, to the degree to justify the unknown risk. The first shot has been given in the state long enough ago so that the second shot should act beneficially to secure mass immunity and it is unlikely to precipitate the incidence of disease.

"It was voted that the Committee recommend that physicians follow the stated policy of the A.M.A. including priorities. The statement follows:

" 'The rechecking of manufacturing procedures and laboratory data following the outbreak of polio in a few vaccinated children has caused unavoidable delay. In the midst of such tension the Eisenhower administration is to be commended for conducting a careful and scientific review of the entire situation before permitting continuance of the program.

" 'In behalf of myself and the A.M.A. Board of Trustees, I have assured President Eisenhower that the Nation's physicians will cooperate in limiting the polio vaccination to children from 5 through 9 until the vaccine is available in larger supply. Children in this age group who do not receive the vaccine during the current program of the National Foundation for Infantile Paralysis for first and second graders will be vaccinated after its completion.

" 'The American Medical Association is asking all physicians to administer vaccine only to children in the priority age group of 5 through 9 until further notice. This will assure that the vaccine will be used first for those most susceptible to the disease.

" 'Physicians are all being asked to keep a record on each child vaccinated. This will include the name and age, the date of vaccination, the site, the manufacturer of the vaccine used and the lot number. This voluntary priority vaccination plan follows the recommendation of the National Advisory Committee on Poliomyelitis Vaccination approved by Secretary Oveta Culp Hobby and contained in her report to the President on May 16.' "

This was discussed by all present, with those present at the Committee meeting filling in with more of the scientific data presented at the Committee meeting. On motion of Dr. Bull, seconded by Dr. Summers, the report was approved.

COMMITTEE ON CARDIAC DISEASES

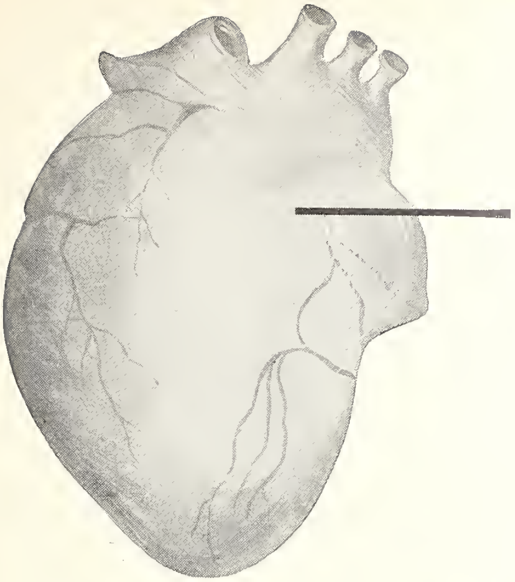
The report of the Committee on Cardiac Diseases was presented, dealing with co-sponsoring a course in cardiac auscultation, H.B. 183, and rheumatic fever. On motion of Dr. Buhler, the report was accepted.

SPECIAL COMMITTEE ON HOSPITALS

The request of the Missouri Hospital Association that representatives of the Missouri State Medical Association meet with their representatives for discussion of mutual problems was reported. Since it was wished to have an early meeting, the President and Chairman of the Council appointed the following committee: three members from the Committee on Hospital and Professional Relations who serve on the Joint Conference, Drs. Hollis Allen, St. Louis; Charles M. Waggoner, Columbia; and Stanley S. Peterson, Springfield; Dr. Buhler, Dr. H. E. Petersen, Dr. Sewell, and Mr. O'Brien ex-officio. This Committee was approved on motion of Dr. Francka. A meeting on June 15 was reported, at which discussion centered around hospital liability for malpractice, Staff and hospital relationship, medical practice act, and the general plans for the committee to function. The committee was set up with terms of office and plan for officers, and times set for meeting as prior to MSMA annual session in the spring and prior to the hospital meeting in the fall, the next meeting to be October 30.

DOCTOR DRAFT SITUATION

The Doctor Draft law and situations pertaining to it were discussed by Dr. Allen. This was commented on by several.



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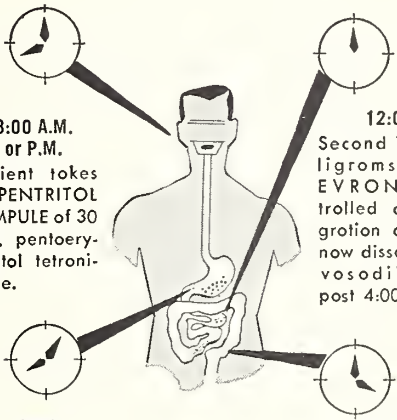
SAMPLES AND LITERATURE
ON REQUEST



8:00 A.M. or P.M.
Patient takes 1 PENTRITOL TEMPULE of 30 mg. pentaerythritol tetranitrate.

12:00
Second 10 milligrams (with EVRON controlled disintegration coating) now dissolve for vasodilation past 4:00.

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10 milligrams dissolve, maintaining vasodilation past 12:00.

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PETN proved one of the best of 14 drugs tested for relief of angina pectoris (1, 2, 3). Pentritol Tempules now extend sustained action through a full 12 hours.

1. Plotz, N. Y. State Med. Jl. 52:16 (Aug. 15, 1952)
2. Russek and Assoc., 153:3 J.A.M.A. (Sept 19, 1953)
3. Winsor and Humphreys, Angiology 3:1 (Feb. 1952)

the Evron company, inc. Chicago 13, Ill.

BLUE SHIELD COMPREHENSIVE CONTRACT

The new Blue Shield Comprehensive Contract was explained to the Council. This contract will include surgical benefits to the extent of $300 in-hospital medical visits up to 70 days care; x-ray, pathology, anesthesia and physical therapy in full for hospital cases with certain exclusions, and office care for traumatic accident cases, including x-ray as per the schedule of benefits.

The new Ford and GM contracts were discussed and though information presently at hand is rather sketchy, it appears that the new contract of Blue Shield may be similar insofar as the benefits are concerned.

It was explained that the contracts have been agreed to by the Boards of Trustees of the St. Louis Blue Shield and Blue Cross plans and it is hoped that they will be offered for sale, to industrial groups only, in a short time.

A meeting of hospital representatives is to be held on July 10, at which time the new comprehensive contracts are to be discussed so that recommendations may be made to the member hospitals of the Blue Cross in the St. Louis Area. It is possible that the hospitals may recommend changes in the coverage at that time so that x-ray, pathology, anesthesia and physical therapy shall be included in Blue Cross rather than Blue Shield as at present and as planned in the new comprehensive certificates. In that event, the Trustees of Blue Shield will wish advice from the Council of MSMA.

DIVISION OF HEALTH

Dr. Amos reported on work of the Division of Health, speaking especially of the hospital licensing law and the survey being made in that connection, saying about one-sixth of the survey had been completed; and the Hill Burton plans for rural hospital beds which may need review as to types of beds required.

W. S. SEWELL, M.D., *Chairman.*

Dr. Nielson Presents Medical Books

Picture taken recently at St. John's Hospital, St. Louis, on the occasion of the opening of the new medical library on the 3rd floor of the institution when Dr. Charles Nielson, emeritus chief of the medical staff—standing next to Sister Mary Brendan, R.S.M., the hospital's administrator—presented several valuable medical books from his personal library. The others in the group are, from left, Dr. Matthew W. Weis, chairman of the hospital's library committee; Mrs. Vincent L. Jones, of the Women's Auxiliary, which organization made the new library possible; Dr. Alphonse McMahon, chief of the medical staff; and Mrs. Harstick, the librarian.

News From the Medical Schools

WASHINGTON UNIVERSITY

The resignation of Dr. Carl V. Moore, dean of Washington University School of Medicine for the past two years, and his appointment as Busch professor of medicine and head of the department of internal medicine was announced recently by Chancellor Ethan A. H. Shepley. Dr. Moore, who succeeds Dr. W. Barry Wood, Jr., in both posts, also will become physician-in-chief to Barnes Hospital. Dr. Moore, whose appointments are effective September 1, will continue as dean until a successor is named. In his new capacities he will be able to engage in a more intensive teaching program and in research.

A total of $113,867 in grants has been awarded by the United States Public Health Service for research at Washington University School of Medicine. Those receiving grants include: Dr. Carl V. Moore and associates, $35,455; Dr. Evarts A. Graham, Bixby professor emeritus of surgery, and Adele B. Croninger, research assistant in surgery, $18,000; Dr. Albert Roos, associate professor of physiology and of physiology in surgery, $14,035; Dr. Amoz I. Chernoff, assistant professor of medicine, $13,545; Dr. Lillian Recant, assistant professor of medicine and of preventive medicine, $8,160; Dr. Seymour Reichlin, Lowell M. Palmer senior fellow in neuropsychiatry, $7,159; Dr. John R. Smith, associate professor of medicine, $6,177; Dr. Samuel C. Bukantz, associate professor of clinical medicine, $6,000; Dr. Arthur Hess, assistant professor of anatomy, $3,240; and Dr. Gordon M. Schoepfle, associate professor of physiology, $1,296.

Dr. Sam L. Clark, Jr., instructor in anatomy, has been awarded a $13,000 two year Lowell M. Palmer Senior Fellowship in the Medical Sciences, Dr. Walsh McDermott, of Cornell University Medical College and chairman of the fellowship selection board, announced recently. Dr. Clark, one of four recipients and the only one from the Midwest, will receive $6,000 the first year and $7,000 the second. He will continue his study of cell structure and tissue, using the electron microscope.

Several awards have been given to Dr. Evarts A. Graham recently. He received on June 4 the Alumni Medal from the University of Chicago, the highest alumni award given by the University, and on June 2 was awarded an honorary doctor of science degree from the New York University—Bellevue Medical Center. Recently Dr. Graham gave the first annual Rollin T. Woodyatt lecture at Northwestern University, Evanston, Ill. His subject was "Remarks on the Development of the Last Field of Clinical Surgery." The lecture honors the late Dr. Woodyatt, an internationally known Chicago physician, medical teacher and investigator.

Fifteen senior medical students participated in the annual Senior Research Assembly May 13 at the medical school. They presented scientific reports on research they did during their medical school training. All research projects were conducted in addition to regular classwork. Participating students were: Galen B. Cook, James E. Darnell, Jr., Robert C. Drews, Edward B. Hager, Wolff M. Kirsch, Edward Lewin, Roger J. Meyer, Stephen I. Morse, Gwendolyn Newton, James C. Peden, Jr., James A. Pitcock, Nathan Simon, Sanford Rabushka, N. L. Steg and William Stoops.

Dr. Robert Elman, professor of clinical surgery, was named president of the American Gastro-Enterological Association at its recent annual meeting in Atlantic City. He is the second surgeon to be president of the association, which is composed chiefly of internists. Dr. Elman has been associated with the Medical School about thirty years.

Dr. Gerty Cori, professor of biological chemistry and cowinner of a Nobel prize, received an honorary doctor of science degree from the University of Rochester June 12. Dr. Mildred Trotter, professor of gross anatomy, recently was elected a member of the Mount Holyoke College board of trustees. She was elected to a five year term.

Dr. Allen O. Whipple, professor emeritus of surgery at the College of Physicians and Surgeons of Columbia University, received the first Graham Award Medal for his outstanding contributions to surgery. The award, a bronze medal, was presented to Dr. Whipple June 6 at the medical school. After the presentation Dr. Whipple delivered an address on "The Story of the Training of the Surgeon." Funds for the award were set up by associates and former students of Dr. Evarts A. Graham when he retired in 1951. The medal will be given every three or four years.

Dr. Whipple also discussed "The Evolution of Medical Education in Different Countries" for senior students and their families at the annual Senior Night June 7. After his speech the following awards to senior students were made: the George F. Gill prize in pediatrics to Gwendolyn Gene Newton; the Alpha Omega Alpha prize for the highest average for the entire medical course to Jules Alfred Kernen; the Prize Fund of the Medical Fund Society, in internal medicine to Edward Lewin, and in surgery to Stephen Ivor Morse; the Borden Undergraduate Research Award of $500 for the most meritorious undergraduate research to James Edwin Darnell, Jr., and Morse; the Bronfenbrenner Memorial Award in infectious disease to Darnell and Morse; and the Mosby book prizes to Oliver Abel, III, Robert C. Drews, David George Murray, James Clark Peden, Jr., and William Lucien Stoops.

The second annual Marvin Katz lecture, sponsored by Alpha Kappa chapter of Phi Delta Epsilon, Washington University medical fraternity, was given May 5 by Dr. William A. Sodeman at the medical school. Dr. Sodeman, professor of medicine and head of the department at the University of Missouri, discussed "Diagnostic Problems in Acute Pericarditis." The lecture is given in memory of Dr. Katz, a student who died three years ago of leukemia but who was awarded his degree posthumously.

Dr. Elisha Atkins, instructor in medicine, delivered the third annual Alpha Omega Alpha lecture May 19 at the medical school. He reported on "Studies in Experimental Fever." The lecture is presented by the Washington University chapter of Alpha Omega Alpha, national medical honor society.

Dr. Alexis F. Hartmann, professor of pediatrics and head of the department, gave the Clifford D. Sweet lecture and clinics May 18-20 in Oakland, Calif. His principal subject was "Pathologic Physiology in Some

Disturbances of Carbohydrate Metabolism." The lecture and clinics are sponsored by the medical staff of Children's Hospital in Oakland.

A faculty member of Washington University School of Medicine and member of the surgical staff of Barnes Hospital anonymously has contributed $2,400 to the department of surgery for the continuation of a fellowship in surgical research. The money will be used to permit the resident in surgery at Barnes Hospital to undertake the study of some problem intimately related to the care of persons suffering with surgically remedial illnesses.

Dr. Mohamad Hafeez Toosy, vice principal of Nishtar Medical College, Multan, Pakistan, has returned to the Medical School at the invitation of Dr. Edmund V. Cowdry, research professor emeritus and lecturer in anatomy and director of the Wernse Laboratory of Cancer Research, to work on the effects of radiation on mice. Dr. Toosy, who worked with Dr. Cowdry last year, after spending three months in St. Louis, will return to Pakistan in September. Before coming to St. Louis this spring Dr. Toosy was a representative of Pakistan at a course on radioisotopes in Oak Ridge, Tenn., under the Atoms for Peace plan. He is a member of the Atomic Energy Commission of Pakistan. A medical graduate of King Edward Medical College at Lahore, Pakistan, Dr. Toosy received a Ph.D. degree from Washington University in 1950.

Dr. Justin J. Cordonnier, professor of urology, presented a paper on "Urinary Diversion Utilizing an Isolated Ileum" at the annual meeting of the American Urological Association held May 16-19 in Los Angeles. Dr. Cordonnier also showed a colored movie entitled "Simplified Suprapubic Prostatectomy." Other faculty members who attended the meeting were: Drs. Morris Abrams, M. Richard Carlin, Charles H. Nicolai and Robert K. Royce. Recently Dr. Cordonnier discussed "Urinary Diversion" at a meeting of the New England section of the association in Springfield, Mass. He was the guest speaker.

Dr. Robert B. King, assistant professor of neurosurgery, and Dr. John N. Meagher, fellow in neurological surgery, presented, by invitation, a paper on "Over-Reaction to Touch Stimuli in the Trigeminal Area of Cats" at the annual meeting of the Harvey Cushing Society held May 16-18 in Quebec, Canada. Dr. Henry G. Schwartz, professor of neurosurgery and a member of the Society, also attended the meeting.

Several papers were presented by faculty members at the 68th annual meeting of the Association of American Physicians May 3-4 in Atlantic City. Dr. Carl G. Harford, associate professor of medicine, discussed "Electron Microscopy of HeLa Cells Infected With ARD Virus." He was introduced by Dr. Carl V. Moore, professor of medicine and dean of the medical school. A paper on "The Action of Cortisone Upon the Acute Inflammatory Response to Thermal Injury" by Dr. Fred Allison, Jr., instructor in medicine and in preventive medicine; Mary Ruth Smith, research associate in medicine; and Dr. W. Barry Wood, Jr., Busch professor of medicine and head of the department of internal medicine, also was presented.

Two papers by faculty members and students (by invitation) were given at the 47th annual meeting of the American Society for Clinical Investigation held May 2 in Atlantic City. The first was "Cardiac Lesions in Rabbits After Pharyngeal Infections With Group A. Streptococci," by Dr. Robert J. Glaser, assistant professor of medicine and assistant dean; Stephen I. Morse and James E. Darnell, Jr., senior medical students; and Dr. Wilbur A. Thomas, instructor in pathology. The second paper, "The Relation of Circulating Endogenous Pyrogen to the Cause of Experimental Fever," was prepared by Dr. Elisha Atkins and Dr. W. Barry Wood, Jr. Twenty other faculty members from the department of medicine also attended the two Atlantic City meetings.

Dr. Harvey R. Butcher, Jr., instructor in surgery and a recent recipient of a Markle Foundation scholarship, presented, by invitation, a paper on "Abnormalities of Human Superficial Cutaneous Lymphatics Associated With Stasis Ulcers, Lymphedema, Scars and Cutaneous Autografts," prepared with Alice L. Hoover, at the recent meeting of the American Surgical Association in Cleveland. Dr. Carl E. Lischer, assistant professor of clinical surgery, was made a member of the association. Five other faculty members from the department of surgery also attended the meeting.

The National Board of Medical Examiners held Part III of its examination at the Medical School June 14.

Dr. Minot P. Fryer, assistant professor of clinical surgery, discussed "Microscopic and Clinical Evaluations of Tumors of the Face" at the meeting of the American Association of Plastic Surgeons held May 4-6 in Washington, D. C. Others attending were Drs. James Barrett Brown, professor of clinical surgery; and Frank McDowell, assistant professor of clinical surgery. Dr. Brown recently visited the new hospital at Effingham, Ill., where he spoke on "Farm, Industrial and Traffic Accidents."

"Management of Acute Facial Injuries" was the subject of Dr. Louis T. Byars, associate professor of clinical surgery, at the recent Clinic Day at St. Anthony's Hospital in Rockford, Ill. On May 14 Dr. Byars was guest speaker at "Pre-Med Day" at the University of Arkansas in Fayetteville. His subject was "Specialization in Surgery."

Dr. Lee T. Ford, Jr., instructor in clinical orthopedic surgery, showed an exhibit on the "Gill Decompression Operation" at a meeting of the North Carolina Medical Society May 1-4 in Pinehurst, N. C. The exhibit was prepared by Dr. J. Albert Key, professor of clinical orthopedic surgery, and Dr. Ford. He also attended the recent spring meeting of the Mid-West Orthopedic Club in Minneapolis. Dr. Key was moderator of a panel discussion on "Reconstructive Surgery in Arthritis" at the American Rheumatism Association meeting June 4 in Atlantic City.

Dr. Joseph C. Edwards, instructor in clinical medicine, showed an exhibit on the management of the hypertensive patient at the annual meeting of the American Medical Association held June 6-10 in Atlantic City.

Four faculty members presented papers at the meeting of the Association of University Radiologists held May 14 and 15 in Ann Arbor, Mich. The papers were: "The Concentration of Colloidal Radioactive Gold in Lymph Nodes Containing Cancer," by Drs. William B. Seaman, associate professor of radiology; and William E. Powers, assistant in radiology; "Use of Electron Microscopy in the Study of Radiation Reactions," by Dr. Arthur Porporis, fellow in radiotherapy; "Radiocardiography," by Dr. Powers; and "Effect of Intraperitoneal Injection of Magnesium on Survival After

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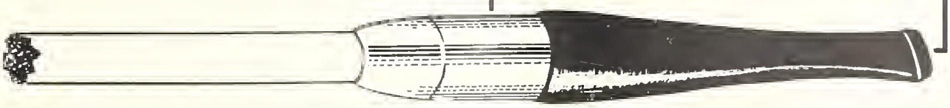

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Whole Body Irradiation," by Dr. Henry C. Blount, Jr., instructor in radiology.

Dr. Richard S. Weiss, professor emeritus of clinical dermatology and lecturer in clinical medicine (dermatology), presided at the recent meeting of the American Dermatological Association in Bel Air, Fla. He also presented a paper on "Lupus Erythematosus." Dr. Clinton W. Lane, associate professor of clinical medicine (dermatology), also attended the meeting. Dr. Lane recently discussed "Cortico-Steroids in Dermatology" at a meeting of the Omaha Clinical Society.

Dr. George A. Ulett, associate professor of psychiatry, gave a paper on "Evaluation of Convulsive and Sub-Convulsive Shock Therapies Utilizing a Control Group" at a meeting of the American Psychiatric Association held May 9-13 in Atlantic City. Other faculty members from the department of psychiatry who attended were: Drs. Edwin F. Gildea, Eli Robins and George Winokur.

Dr. S. E. Luria, professor of bacteriology at the University of Illinois, discussed "The Genetic Functions of Viruses" at a seminar sponsored by the department of microbiology May 19 at the medical school. Another lecturer at the medical school was Dr. J. G. Greenfield, of Queen's Square Hospital, London, who spoke on "The Pathology of Paralysis Agitans" April 19.

Recent visitors at the medical school were His Excellency, Pote Sarasin, ambassador from Thailand to the United States, and Dr. Joseph Harold Sheldon, senior physician at the Royal Hospital, Wolverhampton, England. Ambassador Sarasin toured the medical center while in St. Louis. Dr. Sheldon, president of the International Association of Gerontology, was the guest of Dr. Edmund V. Cowdry. While in St. Louis Dr. Sheldon addressed members of the Gerontological Foundation at a dinner meeting.

UNIVERSITY OF MISSOURI

National Meetings: Attendance at, and participation in, annual meetings of national societies continues to occupy the faculty at the University of Missouri School of Medicine. On April 28 to 30, Dr. George X. Trimble, Instructor in Medicine and Director of the Student Health Service, acted as co-host to the Thirty-Third Annual Meeting of the American College Health Association in Colorado Springs. Dr. Trimble, who is president of the South Central Section of the Association, presided over one of the morning sessions and later led the discussion on one of the papers presented. Drs. Cabelli, Goldberg and Keller of the Department of Microbiology were in New York, May 4 to May 14, attending the Annual Meeting of the Society of American Bacteriologists.

Dr. William A. Sodeman, Professor of Medicine, and Dr. John H. Killough, Assistant Professor of Medicine, attended the meeting of the American College of Physicians in Philadelphia the week of May 2. Dr. Sodeman attended a meeting of the Cardiovascular Training Grant Directors of the nation's medical schools under the auspices of the National Institutes of Health in Madison, Wisconsin, June 5 to 6. Dr. Stuart O. Landry appeared on the program of the Thirty-fifth Annual Meeting of the American Society of Mammalogists in Los Angeles, California on June 13.

At the National League for Nursing Convention in St. Louis, May 1 to May 4, Miss Virginia H. Harrison, Associate Professor of Nursing and Acting Director of the School of Nursing, served as chief hostess while Miss Katherine Mason, Assistant Professor of Nursing and Assistant Director of the School of Nursing, was hostess to the National Student Nurses' Association which met at the same time.

Regional Meetings: Regional and state meetings also occupied the members of the staff. On April 28, Dean Roscoe L. Pullen spoke on "Relationships Between the Hospital and the Community" at a meeting of the Kansas and Missouri Dietetic Association held in conjunction with the Midwest Hospital Association Convention in Kansas City. Miss Dorothy L. Vorhies, Associate Professor of Dietetics and Director of the Dietary Department of the University Hospitals, also spoke at the Midwest Hospital Convention before the Hospital Dietetics Section on "Interdepartmental Relations." On June 10, Miss Vorhies discussed "Floor Plans and Problems in Relation to the Establishment of the Dietary Department of the New Medical Center" before the dietetic interns of St. Louis University Hospitals. On June 13 she presented some ideas on "Common Sense in Nutrition" before the Business and Professional Woman's Club of Columbia and again on June 16 before the Dental Hygienists' Association.

Dr. Robert L. Jackson, Professor of Pediatrics, attended the Regional Meeting of the American Heart Association on May 11, in Kansas City. Dr. Jackson attended meetings of the Committee on Mentally and Physically Handicapped Children of the Missouri Chapter of the American Academy of Pediatrics on April 19 and again on May 2, and also appeared as a discussant of papers on rheumatic heart disease at the annual meeting of the Missouri Public Health Association in St. Louis on May 12 to May 14. Dr. Walter R. Hepner, Jr., Associate Professor of Pediatrics and Medical Advisor to the Missouri State Crippled Children's Service, spoke before the West Central Medical Society in Butler, Missouri, on "Emergencies in the Newborn" on April 14, and before the Grand River Medical Society on "Perinatal Problems" on May 12.

Dean Roscoe L. Pullen appeared on a panel as a part of the "Operations Progress" series on KWK and KWK-TV discussing "Problems of Medicine in Rural Areas" on April 17. On April 25, Dr. Pullen discussed "The Development and Contributions of the New Missouri University School of Medicine" at a joint meeting of the United States Naval Medical Reserve Company 9-1 and the United States Army 374th General Hospital at the United States Naval Air Station in St. Louis. Dean Pullen also spoke on May 11 before the Rotary Club of Lexington, Missouri on the "Progress of the University of Missouri School of Medicine." Dr. Sodeman talked on "Atherosclerosis" before the Terre Haute Academy of Medicine on May 6 and appeared on the program of the Wisconsin Heart Association in Milwaukee speaking on "Acute Pericarditis" on June 4. Dr. Hugh E. Stephenson, Jr., Assistant Professor of Surgery, spoke on "Cardiac Surgery" before the hospital staff of St. Joseph's Hospital in Highland, Illinois.

Two in a series of programs given by members of the staff before the Pettis County Medical Society Forum in Sedalia, Missouri, included a talk by Dr. Sodeman, April 19, on "Sensible Dieting" and another by Dr. Clarence D. Davis, Professor of Obstetrics and Gynecology, on May 10 on the subject "For Women Only." Dr. Davis also spoke on May 12 before the Chariton, Macon, Monroe, and Randolph County Medical Society in Moberly, Missouri on "Amenorrhea."

Dr. Stephenson and Dr. Thomas H. Alphin, Assistant Dean of the Faculty of the School of Medicine, were the guests of Section 4 of the Integrated Missouri Bar Association where Dr. Stephenson appeared on a panel discussing medical legal cases and Dr. Alphin spoke briefly on "A Statewide Medical Examiners System." Dr. Alphin discussed the latter subject before the Cosmopolitan Club of Columbia on May 5, and spoke on the "University of Missouri Medical Center" before the Kiwanis Club of Moberly on May 11.

Assistant Dean Alphin and Dr. Dallas K. Meyer, Associate Professor of Physiology, attended a meeting of the local chapter of Alpha Epsilon Delta, premedical fraternity at Central College, Fayette, on April 28 where they discussed "Medical and Premedical Education."

Dr. Clement E. Brooke, Instructor in Pediatrics, appeared on the Missouri Forum of Station KOMU-TV on June 6 as part of a panel discussing poliomyelitis and the current status of polio vaccine.

Columbia Area: Among programs and activities in the Columbia area was the talk of Dr. Henry V. Guhleman, Instructor in Psychiatry, who spoke on April 26 before the Boone County Council of United Cerebral Palsy. Dr. Hugh E. Stephenson, Jr., Assistant Professor of Surgery, was the dinner meeting speaker of the Boone County Dental Society on April 13. Dr. Thomas D. Luckey, Professor of Biochemistry, spoke on April 23 on "Implications of Germfree Work to Bacteriology" before the Local Bacteriology Society. Dr. Wesley F. Platner, Associate Professor of Physiology, spoke on April 26 in LeFevre Hall on the subject of "Acclimatization to Low Oxygen Tension." Dr. Robert Keller spoke on "Diseases Carried by Water and Sewage" to a group of water and sewage and treatment workers under the sponsorship of the University of Missouri and the State Division of Health on May 30 in Columbia.

Dean Pullen addressed the seminar in educational administration on the subject of "Broadening the Vision of the Administrator in Training" on June 21. Dr. Pullen spoke before the School of Social Work on "The University of Missouri's Medical Program" in Columbia on June 23.

On April 23, there was a joint meeting of the Columbia and St. Louis groups of the Society for Experimental Biology and Medicine under the joint sponsorship of the Medical School represented by Dr. Bertis A. Westfall, Professor of Pharmacology, and the School of Agriculture represented by Dr. Charles W. Turner, Professor of Dairy Husbandry.

Lectureships: Dean Roscoe L. Pullen gave the Sherwood Lectureship of the University of Kansas at Lawrence, Kansas, on April 20, speaking on "Why Train for General Practice?" Dr. William A. Sodeman delivered the Marvin Katz Lecture of Phi Delta Epsilon at Washington University on May 5, speaking on the subject of "Acute Pericarditis." Dr. Sodeman also gave two lectures in Boston on April 28 speaking at Boston City Hospital on "Acute Pericarditis" and at the Harvard School of Public Health on "Amebic Hepatitis."

Grants: Dr. Hugh E. Stephenson, Jr., Assistant Pro-

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fessor of Surgery, has received a grant of $3,214 from the Institute of Neurological Diseases and Blindness of the National Institutes of Health for a study on cerebral anoxia.

Dr. Lloyd Thomas, Associate Professor of Biochemistry of the faculty of the School of Medicine at the University of Missouri, has received a grant of $11,500 from the American Cancer Society in support of research, on the chemical composition of lipoproteins occurring in liver cells.

New Appointments: Three new members have been appointed to the faculty and staff of the University of Missouri School of Medicine. They are: Dr. Samuel P. W. Black of New Haven, Connecticut, to be Associate Professor of Surgery (neurosurgery); Dr. Thomas W. Burns of Dayton, Ohio, to be Assistant Professor of Medicine; and Richard L. Johnson of Chicago to be Associate Professor of Hospital Administration and Superintendent of the University Hospitals. All these men assumed their duties July 1, 1955.

Dr. Black is a Kentuckian who received his Bachelor of Science Degree from Yale University, 1940, and his M.D. degree from Johns Hopkins University in 1943. He interned at the New Haven, Connecticut Hospital, returning there as assistant resident in surgery after two years service in the Navy, 1944-1946. After a year's study in the Yale laboratory of physiology and serving as resident in neurological surgery in the Hartford, Connecticut Hospital, he completed his residency in neurological surgery at New Haven. He was appointed instructor of surgery at Yale University in 1950, and assistant professor (neurology) 1952. Dr. Black is a diplomate of the National Board of Medical Examiners and is certified by the American Board of Neurological Surgery. He is married and the father of four children.

Dr. Burns is a native of Ohio, who was educated at the University of Utah where he earned A.B., M.Sc., and M.D. degrees. He completed an internship and did resident work at Boston City Hospital in 1948 to 1950 and was a research fellow at Duke University from 1950 to 1951. He entered the United States Navy where he did clinical investigations at the Oak Knoll Naval Hospital and with a naval medical research unit in Cairo, Egypt. A member of numerous professional associations and societies, Doctor Burns is the author of thirteen publications on metabolic and endocrinological diseases.

Professor Johnson at the time of his appointment had been assistant superintendent at the University of Chicago Clinics for four years and also Assistant Professor of Business Administration, University of Chicago, and Associate Director of the Graduate Program in Hospital Administration. A native Chicagoan, Johnson received his Bachelor of Science degree from Northwestern University, 1947, and a Master of Business Administration Degree with a major in hospital administration from the University of Chicago in 1950.

He is a member of the American College of Hospital Administrators, the American Hospital Association, and the Illinois Hospital Association. He is the author of ten publications on hospital administration and management, including two books published in 1952, one by the American Hospital Administration, and the other by the American College of Hospital Administrators.

SAINT LOUIS UNIVERSITY

In recognition of his "genius and generosity," Saint Louis University honored its Nobel Prize winning biochemist, Dr. Edward A. Doisy, March 7 by naming the Department of Biochemistry for him.

The Very Rev. Paul C. Reinert, S.J., president of the University announced at a private dinner in Dr. Doisy's honor at the University Club in St. Louis, that the Department hereafter will be known as the Edward A. Doisy Department of Biochemistry.

The dinner marked the twenty-fifth anniversary of Dr. Doisy's assignment of patent and licensor rights to the University for the manufacture and sale of Theelin, the ovarian hormone isolated by Dr. Doisy and his associates in 1929.

Dr. Doisy and his coworkers, principally Dr. Sidney Thayer, professor of biochemistry, announced the isolation of a follicular ovarian hormone on August 23, 1929. The hormone was later named "Theelin" by Dr. Doisy.

The isolation of Theelin (subsequently renamed estrone) stimulated research in the field of endocrinology (the study of internal secretions) and opened the door to a new field of organic chemistry (steroids) compounds endowed with specific physiological action. Having the pure crystalline material available also aided greatly in the further studies of estrone physiology.

Father Reinert presented Dr. Doisy with a plaque which will be placed at the entrance of the Biochemistry Department.

Dr. Albert Kuntz, professor of anatomy and director of the department, was honored with the establishment of a series of annual "Albert Kuntz" lectureships and awards by the University Chapter of the Phi Chi Medical Fraternity, March 23, at the Saint Louis Medical Society. A cocktail party and dinner at the Crystal Room, Sheraton Hotel, preceded the lecture.

James C. White, associate professor of Surgery at Harvard Medical School and Chief of Neurosurgical Service, Massachusetts General Hospital, delivered the first lecture titled "The Role of the Autonomic Nervous System in Chronic Persistent Pain."

The lectureship was named for Dr. Kuntz, a member of Phi Chi and a member of the School of Medicine's faculty for 44 years, because of his significant research contributions on the autonomic nervous system. His writings have laid the foundation for the neurosurgery of the sympathetic systems, with neurosurgeons coming to Saint Louis from all over the world to confer with him on neuro-anatomical problems.

His book, "The Autonomic Nervous System" (four editions), is considered a classic by those in the fields of neuro-anatomy, neuro-physiology and neurology. He is author or coauthor of more than 200 scientific articles.

Dr. White paid tribute to Dr. Kuntz for his research contributions to knowledge of the involuntary nervous system.

Dr. Clarence E. Fronk, president-elect, Hawaii Territorial Medical Society, and director of the Fronk Clinic, Honolulu, Hawaii, delivered the Seventh Annual Alphonse M. Schwittalla Lecture sponsored by the Alpha Omega Alpha Honorary Medical Society at the

School of Medicine, March 25. Dr. Fronk's topic was "Medicine in Hawaii, Ancient and Modern." He also spoke on "Big Game Hunting in Asia and Africa" at a faculty seminar held March 24.

Prominent in many civic affairs in Hawaii, Dr. Fronk is also an internationally known big-game hunter, having headed expeditions and hunted in Africa, India, Mexico, Indo-China and the Philippine Islands.

A 1906 graduate of the School of Medicine, Dr. Fronk established private practice in Honolulu in 1923. Following his two day visit in St. Louis, the Alpha Omega Alpha Honorary Medical Society honored him at their annual banquet and initiated him into their society. Twelve seniors and five juniors were also initiated into the society.

The Saint Louis University department of anatomy was well represented at the convention of the American Association of Anatomists held in Philadelphia April 6, 7 and 8.

Dr. Albert Kuntz, director of the department, reported on "Components of Splanchnic Nerves and Extensions of Celiac and Mesenteric Plexuses in Man." Dr. Kermit Christensen, professor of anatomy reported on "Cholinesterase in the Walls of Veins," while Dr. William F. Alexander, associate professor of anatomy reported on "Histopathological Changes and Cholesterol Levels in the Nervous System of Hypervitaminotic A Rats." Dr. John E. Allison, instructor in anatomy, delivered a paper titled "Studies on Selected Indices of Production of ACTH From the Adrenophypophysis of the Rat" and Dr. John F. Schmedtje, instructor in anatomy, reported on "The Effect of Sympathectomy on Tissue Reactions to Bacterial Exotoxins and on Anaphylactic Tissue Reactions in the Rabbit's Eye and Ear."

Dr. Peter G. Danis, professor of clinical pediatrics and Chairman of the Department, addressed the student members of the Beta Alpha Chapter of the Beta Beta Beta national biological society March 10 at Springhill College, Mobile, Alabama. Dr. Danis' topic was "Picture of Medical Education and What to Expect as Future Medical Students." From Mobile, he went to Little Rock, Arkansas, where he attended a meeting of the committee on medical education of the academy of pediatrics at the University of Arkansas on March 11, 12. Dr. James P. King, assistant professor of pediatrics, accompanied Dr. Danis as a representative of the School of Medicine. The subject of the regional conference was "Pediatric Resident Training and Education." The meeting was sponsored by the Academy of Pediatrics for the Southern and Midwest District.

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As I See It

C. E. HENRY, M.D., *Kirksville*

To the Editor:

This is an attempt to analyze the medical-osteopathic problem by one who saw the early development of osteopathy, and I will show that Dr. Andrew T. Still was antagonistic toward the use of drugs. I was born in 1873 and Dr. Still's children, Fred and Blanch (Mrs. Geo. Laughlin), were childhood companions; the sons, Herman, Charlie and Harry, were older.

I do not remember hearing anyone ask Dr. Still the name of the medical school he attended, nor hear him volunteer such information; however there were men throughout the south and the Atlantic seaboard that made no claim of being medical doctors, and were known as natural bone-setters. Their skill was remarkable and in some localities the medical profession turned all cases of fracture or dislocation over to them. Some medical historians claim they were the genesis of the present day speciality of orthopedics. There are authentic records of good results obtained in the correction of such extreme conditions as, e.g., club foot and spinal curvature. The tradition is that the cult originated in Ireland many centuries ago. The art of manipulation was kept secret and taught only to the oldest son. I do not know if Dr. Still had knowledge of this mode of treatment, nevertheless his methods were similar.

My recollection of Dr. Still is that on first observation he was not at all attractive in appearance. My grandmother and Dr. Still were good friends, and he came rather often to our house. He was very definite in his opinions, and so was grandmother; when they did not agree the argument was apt to be long. My father worked in a drug store owned by a Dr. F. A. Grove. It was a meeting place of many of the leading citizens of the town. Dr. Still and Dr. Grove were from Virginia, and this was mutual ground. Dr. Still had not given a name to his hobby, but he was seldom seen without some portion of a human skeleton either in his hand or pocket. As I remember, the arguments between Dr. Grove and Dr. Still were regarding the cause of disease and treatment; Dr. Still was positively against the use of drugs. To support this statement is the following fact: On Feb. 23, 1915, a telegram was sent from Oregon to a Kirksville newspaper, a news item stating that there was a bill before the legislature that no osteopath would be recognized for licensure who had graduated from a school teaching the use of drugs and writing of prescriptions. This legislative battle was due to a school established by a Dr. M. L. Ward. Dr. Ward was a graduate of the Medical College of Ohio. He spent three years with Dr. Still, then established the Columbia School of Osteopathy on the foundation that the healing art consisted of osteopathy, use of drugs and surgery. It is to be noted that the early graduates of Dr. Still did not hesitate to take on the treatment or care of any condition. Dr. Grove would sometimes heckle Dr. Still, I think out of pure mischief, until Dr. Still would vow to never again set foot in the place. As an example of the heckling; typhoid fever was quite common and Dr. Grove would ask Dr. Still what bone he would set to cure a case. This was about 1884 and I was about the store after school hours and on Saturdays doing chores a boy could do.

Dr. Still had no office and what practice he did was upon the indigent of the town whenever and wherever he chanced to be. His stubborn adherence to his ideas began to attract attention and a better class applied to him for treatment; there were several quite spectacular results. About this time a small group, including his children, formed a class to study under him. The classes were held in a small single room building. He was quite definite in his treatments, each movement was made with the intention of producing certain results. One of his first students came to father asking him to intercede for him with Dr. Still. It seems Dr. Still came upon the student giving a back massage and Dr. Still ordered him out and not to return; father talked with Dr. Still and the student returned to the class. Something new always attracts attention if it has to do with care of the sick. If there is a moderate per cent of success word will get around to people of wealth. The word was passed that cures were being accomplished by a Dr. Still in a little town of Missouri named Kirksville. The town's hotel accommodations were not equal to the demands of some of the wealthy clientele, therefore it was not at all uncommon for the train to set off a special car, sometimes two, one for the family and one for horses and the servants. Not all such cases were cured or benefited but enough to make it apparent there was a good living to be had by following Dr. Still's teaching. Therefore there was an increase in the requests for instruction.

A corporation was formed establishing The American College of Osteopathy. For a teaching staff some of the first class were used as instructors or aids. To house the new organization a substantial building was built, large enough to accommodate the school and a hospital. About 1905 a Doctor William Smith, M.R.C.P. and M.R.C.S. from Edinburgh, Scotland, was employed to teach anatomy and do the surgery in the new hospital. I do not know if this addition of surgery was done upon Dr. Still's initiative or by action of the board of directors. In the curriculum anatomy was stressed as the basic subject, and bodies were obtained for dissection from the State Anatomical Board. Basic science subjects were added and the school began to take on the aspect of a medical school. To separate the regular medical practice from osteopathic practice the adjective "osteopathic" was tacked on, e.g., osteopathic medicine, osteopathic surgery. Dr. Charlie Still proved to be a most able politician. Through his efforts recognition of osteopathy as a method of practice was secured in many states of the Union.

For a time after Dr. Still's death the school and hospital were under direction of his son-in-law, Dr. George Laughlin. There was dissatisfaction among the alumni over the school's management that caused a group of alumni to take over and raise the requirements for entrance and change the curriculum of studies; the requirement now for entrance is three years of college.

The faculty has been increased to about sixty members, seven of whom are Ph.D.'s with honors from scientific societies in Europe. The U. S. Public Health Service has granted generous amounts for research, and the government granted aid in building a million dollar hospital. Druggists and drug detail men tell me the average osteopath buys and dispenses more drugs

READING TIME—1 MINUTE

A FEW FACTS FOR THE BUSY DOCTOR WHO WANTS THE

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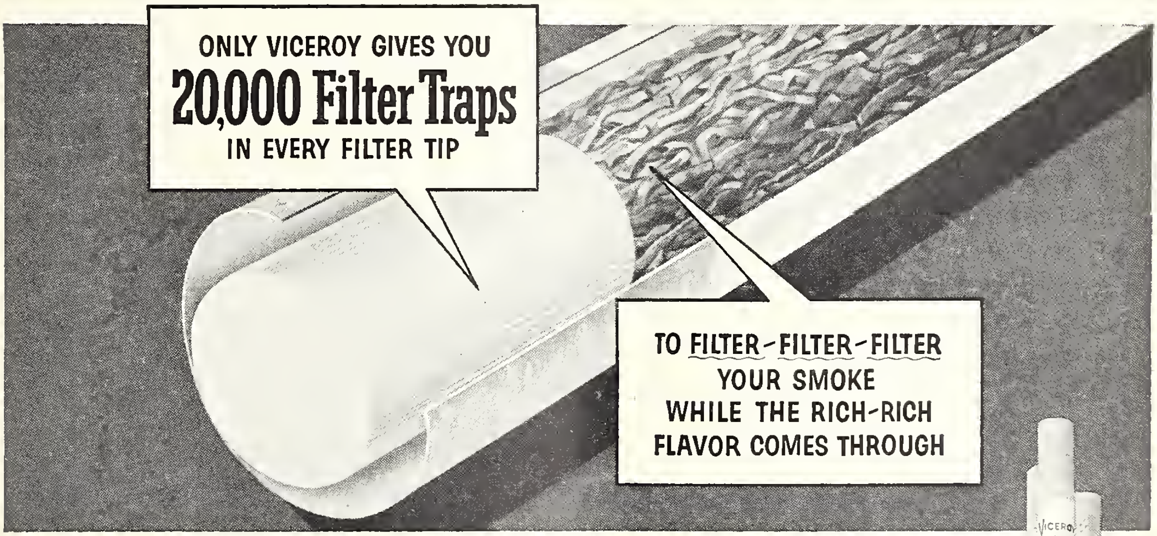
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than the average medical doctor. Medical practice is medical practice, manual therapy requisite to correct a departure from normal is not peculiar to osteopathic teaching. A chair of structural diagnosis is on firm ground. It has been shown through accepted medical research that structural distortion causes functional and organic changes. In a California medical research clinic it has been proven that types of spinal deviation may cause certain forms of functional heart trouble, and relief obtained when the deviation is corrected.

The *Journal of the A.M.A.* has had numerous articles with illustrations dealing with the effects of partial displacement of ribs or vertebra that cause disturbance of spinal nerve roots, thereby causing functional disturbance in the organs it supplies. Not only bone displacement but changes in the ligaments and muscles may cause functional changes. There was an article in the *Annuals of Internal Medicine* having to do with the functional changes induced by contracture of the ligaments around the first and second cervical vertebrae.

The osteopath has no closed source of information, their teaching regarding the use of the galenic drugs, chemotherapy, hormones, antibiotics cannot be classed as osteopathic in origin. It is the tag of osteopathic this or that that causes the term cult to be continued. The present day school of osteopathy has deviated from the original principles. Having known Dr. Still I cannot go along with those who say the present school is a normal outgrowth of an idea, and it would meet with his approval if he were alive today. The present school of osteopathy in Kirksville is a medical school. It is my opinion the teaching that structural deviation may be a cause of functional or organic changes within the tissues of the body, and manual or manipulative therapy may be used effectively as a means to correct such abnormality is proper. This method of treatment could become a specialty with its own board. What the osteopath fears is that he may lose his individuality; this need not be so, rather he gains in stature if he presents himself as a specialist, and confines his work to that field.

Recently elected officers of the Missouri Society of Medical Secretaries and Assistants are Catherine Rand, Kansas City, president; Edna Williams, Springfield, president-elect; Margaret Scott, St. Louis, vice president; Helen Smart, Joplin, recording secretary; Mary Dehoney, Kansas City, corresponding secretary; Etta Young, Kansas City, treasurer. New officers of the Medical Secretaries and Assistants Society of Greater St. Louis are Margaret Scott, president; Kay McGinnis, 1st vice president; Bernadine Pisarkiewicz, 2nd vice president; Rosemary Kleithermes, recording secretary; Elsie King, treasurer.

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Legislation

(Continued from page 639)

ance carrier, if any, and shall be deemed to have lost immunity to suit to the extent of the insurance policy limits.

House Bill 462. Defeated in House Committee on Governmental Reorganization, provided that the Governor shall appoint the director of public health and welfare who will then appoint the directors of each of the three divisions, namely: public health, mental diseases, and welfare. At present, the Governor appoints all of these persons. The act is in conflict with S.B. 60, explained herein, which provides for a commission to appoint the director of the division of mental diseases.

Senate Bill 226. Defeated in Senate Committee on Public Health, provided for a single licensing board to license physicians and surgeons. Sponsored by this Association, the bill had the support of the Missouri Osteopathic Association and the Missouri Hospital Association.

Senate Bill 255. Failed to pass. As originally drafted, act provided for regulation of commercial insurance companies by State Insurance Department. The act was amended in House, after passing Senate, to regulate Blue Cross-Blue Shield plans. The amendment was not accepted by the Senate and the bill failed to pass.

T. R. O'Brien

Book Review

A Manual of Tropical Medicine by Thomas T. Mackie, M.D., Colonel, M.C., A.U.S. (Retired), Chairman, the American Foundation for Tropical Medicine; Consultant in Tropical Medicine, the Roosevelt Hospital, New York City; The Veterans Administration Hospital, West Haven, Connecticut, and The Norwalk Hospital, Norwalk, Connecticut; and George W. Hunter, III, Ph.D., Colonel, M.S.C., U.S.A., Chief, Section of Parasitology Entomology, Fourth Army Area Medical Laboratory, Brooke Army Medical Center, Fort Sam Houston, Texas; Professor of Parasitology, Affiliated Units of the Graduate School, Baylor University; and C. Brooke Worth, M.D., Field Staff Member, Division of Medicine and Public Health, the Rockefeller Foundation. W. B. Saunders Company, Philadelphia. 1954. Price $12.00.

This is the second edition, the first edition of which appeared during World War II as one of a group of volumes prepared under the auspices of the National Research Council to meet the needs of the Armed Forces in the tropics. The contents of that first edition were based largely upon the curriculum of the Course of Tropical and Military Medicine as presented at the Army Medical School, Washington, D.C.

In the preparation of the second edition, the authors have adhered to the fundamental objectives of the original volume. Military medicine continues to be of importance and again effort has been directed to condense information essential for the Armed Forces, the clinician, the field worker and the student of tropical medicine. Changes have been made throughout the book to include important advances in knowledge and to provide the most recent information related to the practice of tropical medicine and tropical public health. Several of the sections have been entirely rewritten by collaborators distinguished in their respective fields so that the current presentation represents the views of recognized authorities.

Chapters have been written on the virus encephalitides, trachoma, rickettsialpox, trench fever, leptospiral diseases, leprosy, toxoplasmosis, gnathostomiasis, trichostrongyliasis, the nutritional diseases, the effects of heat, epidemic hemorrhagic fever and medically important mollusks. Other chapters have been revised, particularly those dealing with the rickettsial diseases, relapsing fever, the dysenteries, malaria, schistosomiasis, filariasis and laboratory technics.

The three authors are well-known authorities on tropical medicine and their list of collaborators include the names of equally well-known scientists.

The book is adequately illustrated. The arrangement of the text is comprehensive and practical. We do not know of any book on tropical medicine that is really equal to this volume. We therefore unhesitatingly recommend it to any physician wishing to have a textbook on this subject.

R. B. H. G.

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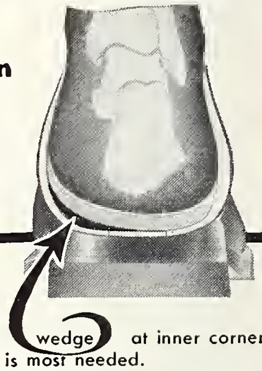

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Curiosa et Trivia

William B. McCunniff, M.D.

There's no question that routine checkups cost money. But consider the plight of United Airlines—a periodic check on each DC-7 Mainliner costs approximately ten thousand dollars . . . and not covered by Blue Cross!

After the execution of Sir Walter Raleigh, his widow reclaimed his head and carried it with her until her death 29 years later. Their son, Carew, then kept his father's head until his own death in 1666, at which time it was buried with him.

The old English verb "to mump," meaning to sulk, gave us our word mumps. The derivation is probably due to the patient's appearance.

The population center of New York City is in Calvary Cemetery, Queens County. It is the point nearest to all of the nearly eight million residents.

Although Stephen Hales in about 1700 devised a method of fairly accurately measuring blood pressure, it was not until 1834 when Jules Herisson developed an instrument which "renders the action of the arteries apparent to the eye." Rocci, in 1895, made the prototype of the constrictive cuff in general use today.

For those who are gastronomically so-inclined, it is reported that "a large rat needs twenty minutes' boiling" before being edible. Toward the short order side, a mouse needs ". . . five to ten minutes, according to size."

A recent survey indicates that about one fourth of the illnesses in a typical American town get no treatment—not even home prescribed medication. Of those treated, about 10 per cent are treated entirely by non-medical personnel.

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Woman's Auxiliary

MRS. FRANK B. LEITZ, *President*

The fall meeting of the executive board of the Woman's Auxiliary to the Missouri State Medical Association is scheduled to be held in Sedalia on Tuesday and Wednesday September 27 and 28. Mrs. A. J. Campbell and Mrs. J. W. Boger will serve as chairman and co-chairman of the committee on arrangements. The meeting will be held in the Hotel Bothwell.

Definite time for the meeting will not be set until train schedules for that time of year have been announced.

The meeting will start with a dinner on Tuesday evening. Designs for state auxiliary presidents' and county auxiliary presidents' pins have been adopted. Following the dinner there will be what has been termed a "mass pinning." Mrs. Charles T. Shepherd, our president-elect, who designed the state presidents' pin, is in charge of plans for a unique, never-to-be-forgotten, method of presenting pins to past presidents of the state auxiliary and to present presidents of county auxiliaries. We hope for a record attendance of these presidents.

The September issue of the Woman's Auxiliary *Quarterly Bulletin* will carry details of other plans for Tuesday evening and the business and report session on Wednesday.

Many states have had presidents' pins for some time. Kansas adopted a lovely design for its pin three or four years ago. We are told that Dr. C. Omer West of Kansas City, Kansas, was in charge of the "mass pinning" of past presidents at that time. His method of presentation, a buss with each pin, was considered so successful, that Dr. West has been invited each year since then to present the past president's pin.

Will all Missouri "mass pinning" volunteers contact Mrs. Charles T. Shepherd?

Missouri Academy of General Practice

KENNETH GLOVER, M.D., *Mount Vernon*

Salk Vaccine Continued—Annual Session

We are still interested in the Salk Polio vaccine. Now, after two months, we are assured of having the second vaccination scheduled for first and second grade youngsters. Probably by the time this article is printed Congress will have made a definite decision as to allotment of Federal funds for all children who are unable to pay for private vaccinations. The delay has been costly. The exact number of children who may have had the disease who would otherwise have been protected will never be known. Politically, this football has been well kicked around. We only hope that in this discussion that greater precautions for the protection of our youngsters will be the end result. Only such as this could justify this awkward delay.

Soon the Missouri Academy of General Practice will be making plans for its annual meeting to be held in Jefferson City the last of October. Each year the program has been a little larger and a little better than the previous year. If you have not made plans to attend yet, would you start making them, because October will soon be here.

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Missouri State Board of Medical Examiners

Duff S. Allen, M.D., *President*

Meet Your State Board of Medical Examiners

At the 1955 Annual Session of the Missouri State Medical Association in Kansas City it became apparent to some of us that many of the doctors throughout the State of Missouri would like to know more about the State Board of Medical Examiners.

After discussions with Dr. Petersen, the retiring President of the Missouri State Medical Association, and with Dr. Buhler, the incoming President, it was thought worth while to publish a series of short articles in Missouri Medicine explaining, first, the duties of the State Board of Medical Examiners and, then, to explain the composition of the Board and its relationship to the Medical Association and its obligations to the people in the state. This is the first of such articles.

The present Board members are: Duff S. Allen, M.D., St. Louis, president; Harry A. Klein, M.D., St. Louis, vice president; Elvin D. Imes, M.D., Maryville, secretary; William J. Shaw, M.D., Fayette; W. O. Finney, M. D., Chaffee; Edwin C. White, M.D., Kansas City; Mr. John A. Hailey, Jefferson City, Jefferson Building, executive secretary.

Your State Board of Medical Examiners is the official board of the state. Its purpose is to issue licenses to practice medicine in the State of Missouri to those who are qualified. At the same time, it has the obligation to see to it that everyone who is not qualified to practice medicine in the State of Missouri is not permitted to do so. Besides these two functions, it is also our duty to revoke licenses to practice medicine if the holders of such licenses are proven unworthy.

The granting of a license to practice medicine is a function of the states. It should not be done by the federal government because the federal government is too big; it should not be granted by a county or a city because this unit of government is too small. It should be, as it is, the business of the state. We are sure that every doctor, when he stops to contemplate even for a moment, will see at once the great responsibilities of your State Board of Medical Examiners because once a doctor receives a license to practice medicine in our state he is given a lifetime privilege which is seldom revoked. Conversely, a man who is not qualified to practice medicine may do so for years on end unless your Board steps in and stops him from doing so.

How would you go about setting up the ideal board to examine candidates and to issue licenses to practice medicine? Of course, first of all you would follow the law as it is written and interpreted for you. Then you would consult the various medical societies and other sources of information to enable you to pick out six of the members of the Missouri State Medical Association whom you would have reason to consider as being well qualified for the duties of the board. This, in our state, is the present method of their selection. The Governor makes these appointments.

Your Board is unhampered in its actions. We are simply instructed to do a good job according to the laws of the state.

(Next month: "The Problem of the Foreign Educated Physician.")

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1. Eisenberg, et al., Antib. & Chemo., 3:1026-1028, Oct., 1953.

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Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

The pure ad. law, passed by the Missouri legislature, became effective in June. Shall it become a dead letter?

"Twilight Sleep" had been abandoned by the St. Louis City Hospital. The treatment was found costly and unsatisfactory.

The supreme court has confirmed the action of the State Board of Health revoking the license of Dr. A. M. Conway of Columbia for ten years on account of writing numerous prescriptions for whisky. He had written 778 prescriptions, and the supreme court holds that each prescription constituted a separate offense. The court also declared the board was within its rights in revoking the doctor's license on that ground.

The College of Physicians and Surgeons, Medical Department of the University of Southern California, announces the placing of all first and second year teachers on full time, beginning with the 1915 session. They will have no other duties than that of teaching, and will be paid good salaries.

The regular meeting of the Benton County Medical Society was held at Warsaw in Dr. Dillon's office, with Dr. W. G. Jones of Lincoln, president pro tem, in the chair. The president, Dr. J. A. Logan, was made late in arriving by having to go a long distance out of the regular road to get here on account of the high water. Dr. Eugene Heibner, a recent graduate, who has been visiting "home folks" before taking up his duties at the German Hospital in Kansas City, was a guest, and gave a good talk on Dr. Dillon's paper.

At the Cape Girardeau County Medical Society meeting, Dr. Vinyard read a paper entitled "Brotherly Love," in which he showed the tricks attempted by some physicians to gain an advantage at the expense of their brother physicians. He closed his excellent paper by describing the ideal physician.

By invitation of the members residing in Willow Springs, the Howell County Medical Society met in this hustling little city, in their "Mid-Summer Get-Acquainted" meeting. Dr. H. J. Rowe read a paper entitled "The Commercial Doctor," which was written in rhyme—the first known instance of a medical paper being so written and delivered. He starts out by drawing a picture of the family doctor, with his honest countenance, holding the confidence of his patrons as a sacred trust, and he himself looked up to as counselor and friend, but the commercial doctor of today is a far different man, resorting to any means to filch money from the pockets of his victims and doing violence to our honored code.

TWENTY-FIVE YEARS AGO

Eighteen men now living enjoy the honor of having been president of the A.M.A., and at the Detroit session, June 23 to 27, a medal to be worn on official occasions was presented to each of them by the Association. Dr. Edward B. Heckel, Pittsburgh, chairman of the Board of Trustees, made the presentation. The medal bears on one side a profile of Aesculapius, the Greek god of healing, and a rod and serpent, encircled by the words "American Medical Association Founded 1847." On the reverse side appears the name of the recipient and the year of his presidency, with a symbolic representation of healing herbs. Those receiving the medals and the dates of their presidency were: William Williams Keen, Philadelphia, 1900-1901; Frank Billings, Chicago, 1903-1904; William James Mayo, Rochester, Minnesota, 1906-1907; William Henry Welch, Baltimore, 1910-1911; Rupert Blue, United States Public Health Service, 1916-1917; Charles Horace Mayo, Rochester, Minnesota, 1917-1918; Arthur Dean Bevan, Chicago, 1918-1919; Alexander Lambert, New York, 1919-1920; William Clarence Braisted, United States Navy, 1920-1921; Hubert Work, Washington, D. C., 1921-1922; George Edmund de Schweinitz, Philadelphia, 1922-1923; Ray Lyman Wilbur, Stanford, California, 1923-1924; William Allen Pusey, Chicago, 1924-1925; William David Haggard, Nashville, Tennessee, 1925-1926; Wendell Christopher Phillips, New York, 1926-1927; Jabez North Jackson, Kansas City, Missouri, 1927-1928; William Sydney Thayer, Baltimore, 1928-

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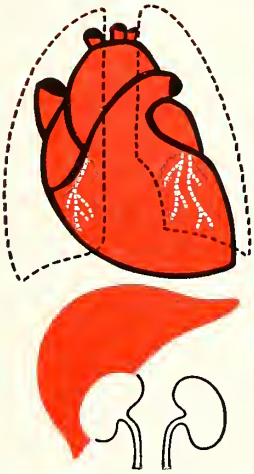

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1929; Malcolm La Salle Harris, Chicago, 1929-1930.

The Council on Medical Education and Hospitals reported on an experiment of assigning third and fourth year students to practitioners during summer vacations for practical experience, suggested in a resolution introduced by the Missouri delegates at the Portland session in 1929. The plan is being tried by the University of Wisconsin Medical School.

The *New England Journal of Medicine* reports the opening of the Baker Pavilion of the Massachusetts General Hospital. All professional charges are included in the patient's hospital bill and the maximum charge for all professional services, no matter how long the treatment nor how serious the case, has been definitely fixed. Fees for laboratory, x-ray and operating room services are standardized so that each patient entering the hospital has a clear idea of the approximate cost.

TEN YEARS AGO

Dr. E. K. Langford, Platte City, has been appointed county physician for Platte County and health officer of Platte City.

Dr. Robert Vinyard, Springfield, was one of the speakers at the laying of the cornerstone of the new nurses home at St. John's Hospital, Springfield, on June 10.

Dr. R. M. James, Joplin, began his duties as State Health Commissioner on July 1.

The class of 1895 of the Missouri Medical College (now Washington University School of Medicine) celebrated the fiftieth anniversary of its graduation in St. Louis on June 22 and 23. Twelve of the twenty-three surviving members of the original class of sixty-three, with their attending ladies, had dinner. In attendance at the celebration were: Drs. W. M. Munsell, Grandview, Washington; N. T. Enlow, Chico, California; S. Horwitz, Peoria; E. P. Staff, Ramsey, Illinois; W. E. Angell, Rocheport, Missouri; J. W. Winn, Higbee, Missouri; W. E. Gibson, DeSoto, Missouri; C. G. Ahlbrandt, Kirkwood, Missouri; A. T. Quinn, R. E. Schlueter, R. J. Terry and John Zahorsky, St. Louis.

Captain Alphonse McMahon, St. Louis, Chief Medical Service, U. S. Naval Hospital, Bethesda, Maryland, accompanied President Truman and his advisory party on the trip to Berlin to consult with Stalin and Churchill.

Colonel Lee D. Cady, St. Louis, commanding officer of the Twenty-first General Hospital in France, was decorated July 19 with the Croix de Guerre by the French Government "for exceptional services during the liberation of France." The ceremony took place in Paris at Napoleon's Tomb.

Colonel Howard A. Rusk, St. Louis, Director of the Convalescent Rehabilitation Division of the Army Air Forces, flew from Washington to Potsdam, Germany, to confer with President Truman and General Omar N. Bradley on the reorganization of the Veterans Administration.

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Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 52 September, 1955 Number 9

Miokon®

A Preliminary Clinical Report on a New Intravenous Urographic Medium

CHARLES H. NICOLAI, M.D., *St. Louis*

IN AN ATTEMPT to lower the toxicity of intravenous urographic media, a new compound was developed which has the generic designation: Sodium Diprotrizoate.* This compound contains 57.4 per cent iodine and is furnished in 30 cc. ampuls of a 50 per cent solution. Preliminary clinical evaluation is based on experience with Miokon® in 750 intravenous urograms and 20 translumbar aortograms.

LABORATORY STUDIES

The intravenous LD_{50} for adult male albino mice was found to be 18,400 mg. per kilogram, an amount higher than that for other media now available. No toxicity was noted in the dog when observed for a week after receiving intravenously 1,500 mg. per kilogram.** Urinalyses performed on specimens obtained from patients thirty minutes and again twenty-four hours after urography with Miokon® have not shown any induced proteinuria or changes in the urinary cytology. The nonprotein nitrogen values were not altered by the administration of this medium.

ADMINISTRATION

Persons who gave a positive allergy history were denied intravenous urography. The patients were prepared by dehydration for twelve hours. An intravenous test dose of 1 to 3 cc. was given and if no reaction occurred after one minute, another 1 to 3 cc. were given. Again after a period of observation for another one to two minutes, the remainder of the 30 cc. dose of the 50 per cent solution was given over another two to three minute period. The incidence of side reactions appears to be related to the speed of injection. If the injection is over a period of three minutes or longer, the incidence of reactions is lower than if a shorter period is used, with the exception of venous irritation which is more prevalent with the longer injection periods.

RESULTS

The quality of the pyelograms was considered as "satisfactory" if they were diagnostic and "unsatisfactory" if not. Satisfactory results were obtained in 96 per cent of the urograms. Detailed pyelogram quality data are contained table 1. The incidence of patients experiencing one or more side reactions was 9.8 per cent. Detailed reaction data are listed in table 2. Most of these side reactions have been mild. On numerous occasions, a slight rise in the blood pressure was noted. Only one neuromuscular disturbance occurred and that was a convulsive reaction that was readily controlled with intravenous barbiturate. This reaction occurred in an epileptic, undiagnosed prior to administration of the media, but

TABLE 1

PYELOGRAPHIC QUALITY IN 750 CASES

Excellent	*Good*	*Fair*	*Poor*	*Non-Visualization*
294	300	126	26	4
Satisfactory 720 cases 96%			Unsatisfactory 30 cases 4%	

Division of Urology, Department of Surgery, Washington University School of Medicine, St. Louis, Missouri.

* This media, known as Miokon®, was developed and furnished by the Mallinckrodt Chemical Works, St. Louis, Missouri.

** Hazelton Laboratory, Falls Church, Virginia.

from whom a history of epilepsy was obtained later. She had an uneventful recovery without any residuals.†

Twenty translumbar aortograms have been performed using Miokon®. Some of these were done with only local anesthesia and most of these patients experienced little if any discomfort on injection. The amount of medium used varied between 20 and 50 ccs., the latter amount being used to visualize the peripheral arterial branches. No untoward reactions or sequellae have been observed, including one patient in whom the entire 30 cc. injection was inadvertently delivered periaortically. Post-aortographic urinalyses have not shown any abnormalities and the nonprotein nitrogen values have not been altered.

TABLE 2

REACTION INCIDENCE IN 750 CASES

Reaction	*Number*	*Percent*
Nausea, only	31	4.2
Nausea and Vomiting	17	2.3
Flush	15	2.0
Taste	9	1.2
Arm Pain	6	0.8
Urticaria	5	0.7
Convulsion	1	0.1
Chill (?)	1	0.1
Light-headedness	1	0.1
Patients experiencing one or more reactions	74	9.8

SUMMARY

This is a preliminary clinical report on the new urographic media Miokon®, based on the results derived from 750 intravenous pyelograms and twenty translumbar aortograms. The incidence of patients experiencing one or more side reactions was 9.8 per cent, and 96 per cent of the pyelograms were satisfactory. This study will continue.

4960 Audubon Ave.

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† Since the completion of this series, one episode of hypotension has occurred following the administration of Miokon®. Evaluation of the extent to which Miokon® contributed to this reaction is difficult to evaluate because of the physical condition of the patient prior to the injection.

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Painless Proctology

Use of Topical Anesthetic for Examination and Treatment of Painful Anorectal Conditions

RAYMOND L. MORROW, M.D., *Kansas City*

THE ABUNDANT nerve supply of the anorectum is well known and this area is considered by most people to be one of the most sensitive spots in the body. Anything that can be done to safely anesthetize this area is appreciated by the patient and makes the task easier for the examiner. The examination will not only be easier on all concerned, but will be more complete and less pathology is overlooked if the patient is relaxed, comfortable and cooperative during the examination.

A natural reluctance, frequently combined with anal muscle spasm and a painful anal lesion, often precludes satisfactory digital examination. Gorsch[1] recommends the injection of the anal sphincters with an aqueous or oil soluble anesthetic but, in my practice, which is limited to proctology, this has not been necessary since using a quick acting topical anesthesia.

During the last two years the routine use of a topical anesthetic, namely Tronothane,* has proved the safeness and efficacy of such an agent. Several patients have been adequately examined whose family doctor had been unable to make even a digital examination using the little finger.

Tronothane hydrochloride is 4-n-butoxyphenyl gamma-morpholinopropyl ether hydrochloride.[2] Its chemical constitution is especially interesting when compared with other topical anesthetics now available. It contains neither the para-aminobenzoic acid group nor the radicals, such as diethylamino, dimethylamino, dibutylamino, methyl piperidine, isoquinoline, nor esters, amides, and anilides, which are frequently associated with toxicity and pharmacologic activity.

The morpholino radical is unique among clinically useful local anesthetics; it usually reduces both toxicity and pharmacologic activity, but in this instance it reduces toxicity only and the local anesthetic activity is retained.

Because of its unique chemical structure, in patients with sensitization to other local anesthetic drugs, Tronothane is not likely to cross react with a variety of available local agents.

In addition to proctology, Tronothane has been used in obstetrics and gynecology, anesthesiology and dermatology. Local anesthetics of this type are not intended for indefinitely prolonged use, but are for palliative effect during the time required for diagnosis and establishment of specific therapy.

TECHNIC OF EXAMINATION

The patient is placed in the lateral Simms position and after inspection of the perianal area, a small cotton applicator soaked in Tronothane 1 per cent solution is used to wash the perianal skin. The applicator is then left in the anal outlet while the examiner puts on a finger cot or glove. The solution may also be sprayed on the skin at the anal outlet, using a standard atomizer or spraying device.

Tronothane jelly, 1 per cent, is then applied liberally to the finger. The applicator is removed and the jelly is gently massaged into the anal canal. The finger is inserted slowly, pointing toward the umbilicus and allowing the sphincter muscles to relax ahead of it. The jelly is allowed to remain in contact with the anoderm for several minutes while the anoscope or proctoscope is being lubricated with this same jelly and made ready for use.

The jelly has the advantage over many so-called anesthetic ointments and creams in that it is transparent and does not obscure any pathology such as an internal fistulous opening or a small foreign body. A Hirschman type of anoscope is used for the examination because it produces less pain and trauma than a bi-valve speculum or some other type of anoscope.

TREATMENT

Tronothane jelly has been useful on painful thrombosed external hemorrhoids which are too extensive for office excision while the patient is awaiting operation, or, if patient refuses office operation and wants pain relief until thrombosis is absorbed. Fissures and anal ulcers also can be given symptomatic relief until surgery can be done. In cases of ulcerative colitis in which there is fissuring in the anal canal and irritation of the perianal skin, relief can be obtained even when rectal surgery is contraindicated. The patient may apply the jelly, cream or solution himself, including the spray, using a DeVilbiss, No. 40 atomizer. Tronothane provides a means of interrupting the itch-scratch dermatosis cycle without injection and can be an adjunct in the treatment of so-called idiopathic pruritus ani.

Director of Proctology Service, General Hospital No. 1, Kansas City.

* Tronothane®, Hydrochloride (Pramoxine Hydrochloride), Abbott Laboratories, North Chicago, Ill.

SIDE EFFECTS—SENSITIVITY

An occasional patient mentioned an initial stinging or burning sensation when the anesthetic agent was applied, but this was transitory and followed by the numbness desired. No other side effects were noted. Pharmacologic studies have shown it to be a potent agent with extremely low toxicity and minimal primary sensitivity or cross sensitivity.

I have used Tronothane successfully on several patients who gave a history of being sensitive to the "caine" drugs. Tronothane not only has a low sensitizing and toxicity index of its own, but it can be used in circumstances in which cross sensitivity might be a danger. Furthermore, the use of a topical anesthetic such as Tronothane makes it possible to use any of the injection anesthetics such as procaine at any time in the future without there being a possibility of cross sensitization. This is due to the fact that Tronothane is never used by injection.

SUMMARY

1. An effective topical anesthetic has been used in the examination and treatment of proctologic patients over a two year period with no sensitivity or toxic effects.

2. Quicker, more anesthetic results have been achieved than with several "caine" preparations previously used.

3. Suggestions have been offered for the technic of application which has proved effective, especially in office proctologic practice.

409 E. 63rd St.

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Capsule Clinics

IRVING A. WIEN, M.D.

- Myositis ossificans progressiva is a congenital disorder in which recurrent inflammatory attacks in fibrous tissue planes with ossification in tendons and fibrous intersections of muscles occur after each attack. The disease is progressive and not amenable to any known treatment. Watson-Jones, R.: Fractures and Joint Injuries, 1, 4th Ed., Williams & Wilkins Co., 1952.

- Clinical evidence of union of a fracture should be based on clinical tests as loss of elasticity, absence of pain and absence of tenderness; all of which may be present before radiographic evidence of calcification of the callus. Watson-Jones, R.: Fractures and Joint Injuries, 1, 4th Ed., Williams & Wilkins Co., 1952.

- Regional enteritis is a disease of unknown cause and in most cases is limited to the terminal ileum and varying portions of the colon. Mayo, C. W.: Surgery of Small and Large Intestines, Year Book Publishers, Inc., Chicago, 1955.

- Difficulties encountered in vaginal hysterectomy may be excessive bleeding or hematoma, prolonged surgical procedure, edema in the broad ligaments, pelvic inflammatory disease and hemisection necessary to perform the operation. Eisman, W., and Pratt, J. H.: Proc. Staff Meet. Mayo Clin. **30:** June 15, 1955.

- In the normal adult from 600 to 2,500 cc. of urine is formed daily. About half as much urine is formed during sleep as during activity. Harper, H. A.: Review of Physiological Chemistry, 3rd Ed., University Medical Publishers, Palo Alto, California, 1951.

- Plasma proteins are constantly interchanging with tissue protein; this exchange between the two is known as the "dynamic equilibrium." Harper, H. A.: Review of Physiological Chemistry, 3rd Ed., University Medical Publishers, Palo Alto, California, 1951.

- Duodenal diverticula exist in 5.8 per cent of patients in whom careful x-ray studies of the upper gastrointestinal tract are made. Mayo, C. W.: Surgery of Small and Large Intestines, Year Book Publishers, Inc., Chicago, 1955.

- Signs of damage to the common bile duct in the postoperative period are: biliary fistula, bile peritonitis, and jaundice. Boren, J. A., and Walters, W.: Proc. Staff Meet. Mayo Clin. **30:** June 15, 1955.

- According to Edmondsen and Steiner, in the United States and Europe, cancer of the liver constitutes about 1 per cent of all malignant neoplasms. The Cancer Bulletin, Missouri Edition, May-June, 1955.

- A cancer test should have three basic purposes: a screening device to detect cancer, a means of differentiating malignant and non-malignant disorders, and it should detect changes in tumor activity in order to estimate the success of a treatment. The Cancer Bulletin, Missouri Edition, May-June, 1955.

- Common causes of stomatitis are: bacterial infections, virus infections, fungus infestations, deficiency diseases, allergy, trauma-thermal or chemical, or blood dyscrasias. Oliver, K. S.: Surg. Clin. N. America **35** (June) 1955.

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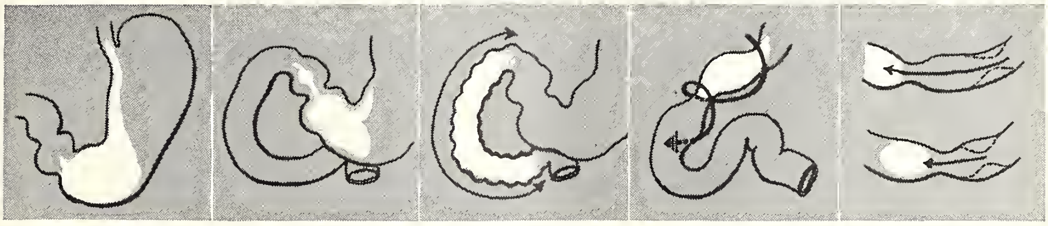

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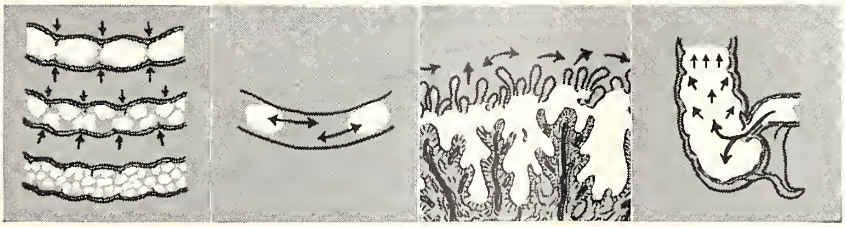

Kneading Action | Pendulous Movement | Villi Mixing | Ileocecal Dilation

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SEARLE

Postgraduate Review

Management of Deep Transverse Arrest

And Persistent Occiput Posterior

CLARENCE D. DAVIS, M.D., and WILLIAM T. ELLIS, M.D., *Columbia*

WHEN ONE READS an article on "Trial of Forceps," "Failed Forceps," "Can Mid-Forceps Be Eliminated," one seldom finds a clear discussion of the reasons why such forceps maneuvers were necessary in the first place. An account of whether the maneuver used was properly timed or ideally selected to fit the situation is also frequently lacking. It is only too common for the situation to be adapted to the maneuver, only too often with disastrous results. The main reason why difficult mid-forceps applications are necessary is either ineffective uterine contractions or some degree of cephalopelvic disproportion in the mid-pelvis, or both. It is commonly hard to distinguish between these two factors or when they are both present to properly assign relative importance to uterine inertia or cephalopelvic disproportion. This paper will emphasize the latter but it must be borne in mind the two are usually mutually complementary.

Fortunately, most obstetrics is relatively routine and the outcome a happy one for all concerned. Occasionally, however, as all know, such is not the case, and the obstetrician must really be on his metal. The primary obligation of an obstetrician to a woman in labor should be to aid in the delivery of a viable infant in such a manner as to cause a minimum of damage to the mother and infant. Upon occasion, interference during the delivery is necessary to help attain this end. Unless this interference be applied according to certain cardinal principles of obstetrics, the interference may do more harm than good to the mother or the fetus, or both. It is with these thoughts in mind that we propose to discuss briefly the management of deep transverse arrest and persistent occiput posterior.

PELVIC TYPES AND ENGAGEMENT

There are four main types of pelvic inlets. Caldwell, Moloy and D'Eposo, in a roentgen study of 177 white women, found the gynecoid type in 44.2 per cent, the android type in 22.6 per cent, the anthropoid type in 27.6 per cent and the platypelloid type in 5.6 per cent. Further classification into subtypes is obviously possible but this is largely of academic interest only. The type of inlet is only of importance as regards mid-pelvic arrests in that this helps determine the position of engagement.

There is no universal agreement amongst various observers as regards the exact positions in which the head engages. Because the head commonly rotates to an oblique diameter, it used to be thought that this was the usual position of engagement.

In 1934, Caldwell, Moloy and D'Eposo, using steroscopic x-ray technics showed that the transverse position was present in 60 per cent of the 200 patients studied. However, in the gynecoid and android pelvis, the percentage was 70, whereas it was 37.5 per cent in the anthropoid type. Engagement in the anterior-posterior diameter with the occiput posterior was found approximately as follows: gynecoid, 10 per cent; android, 20 per cent, and anthropoid, 30 per cent. Steele and Javert, using x-ray technics, found a transverse position in 63.4 per cent of 763 patients with the occiput above or at the brim and 62.8 per cent of 277 with occiput in mid-pelvis, either at or just below the spines. Snow stated that in collected series of 1,393 patients that a transverse position was noted in 24.7 per cent and posterior in 34.5 per cent. Calkins, in a clinical study of more than 10,000 women examined in early labor, found that 51 per cent of the fetuses were in the anterior position and 49 per cent were posterior.

Suffice it to say that there is no uniform agreement as regards position of engagement. The differing times in labor that the diagnoses were made, the differing technics used, the incidence of abnormal pelvic types in the material studied must all play some part in the discrepancies. However, it is apparent that one can no longer accept the oblique diameter as the most common position of engagement.

We are not herein concerned with pelvic inlet disproportion and in the discussion following it will be assumed that engagement has taken place. This means the biparietal diameter of the head has passed the inlet and therefore the lowermost part of the head will be at or below the ischial spines. It will also be taken for granted that we are dealing with cephalic presentations.

MID-PELVIS

The exact cause of internal rotation has never

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been unequivocally established. It usually occurs with the head on or near the pelvic floor. The chief factors responsible for internal rotation are considered to be the structures of the pelvic floor, particularly the levator ani muscle, and the forces of labor. Anterior rotation usually occurs in the presence of effective labor unless there are prominent ischial spines or a forward sacrum or both.

The gynecoid pelvis (45 per cent) is characterized by a round or slightly ovoid inlet, straight side walls and an average sacrum. This is the ideal obstetric pelvis as internal rotation usually occurs regardless of position of engagement. Serious mid-pelvic arrests are uncommon.

The android pelvis (25 per cent) has major masculine characteristics. The inlet is wedge shaped with a wide posterior segment. This accounts for a relatively high incidence of primary posterior engagements. The sacrum may or may not be prominent. The side walls tend to converge with narrow interspinous and intertuberous diameters. The major difficulty with this type of pelvis comes with the posterior engagement, and an associated prominent sacrum and narrow interspinous diameter which prevents internal rotation anteriorly. The head may engage transversely and stay in that position if the sacrum is sufficiently forward.

The inlet of the anthropoid pelvis (25 per cent) has a long oval appearance with a narrow transverse diameter. The side walls and sacrum are usually average. Engagement is not transverse in five out of eight instances. If it is anterior, there usually is no particular trouble. If it is posterior it will remain posterior if there is any significant disproportion in the mid-pelvis.

There are other possibilities in this type of pelvis. The head may start to rotate and only get to the transverse. (This is considered even by some of the textbooks to be the usual mechanism of production of the deep transverse arrest. We will see later that this is not so). This situation is usually caused by lack of adequate uterine contractions and therapy should be directed to correct this. If there is enough room for the posterior head in an anthropoid pelvis to rotate to the transverse, there usually is room enough for it to rotate anteriorly.

The platypelloid pelvis (5 per cent), the so-called flat pelvis, presents a transverse oval inlet with usually straight side walls and wide interspinous and intertuberous diameters. This type of pelvis does not, as a rule, give rise to mid-pelvic difficulty.

HANDLING OF PATIENT IN LABOR

Any time the obstetrician is dealing with a desultory labor or one in which adequate progress is not being made, consultation should be sought whenever possible. At this time there should be a careful evaluation of the type of labor that has occurred so far. One should not confuse the issue. The apparent suffering of the patient or the anxiety of the family are not true criteria. The palpable firmness of the uterus and degree of dilation of the cervix are true criteria. It is often of help if one knows the history of any previous labors. They tend to repeat themselves. The size of the fetus should be carefully estimated clinically and later correlated with roentgen findings. A sterile vaginal examination when one is in this predicament gives much more information than a rectal one. The size of the mid-pelvis should be evaluated meticulously and the position of the head determined. If there is any deflection of the head an attempt to flex it should be made. Rupture of the membranes should be seriously considered, bearing in mind the possibility of prolapse of the cord. One should adjudge the size of the fetal head and the degree of moulding. If there is any reasonable doubt concerning the adequacy of the pelvis, x-ray pelvimetry should be carried out. When primary uterine inertia is present probably low dosage intravenous pitocin is the treatment of choice. This demands constant attendance by the obstetrician. Rest of the patient is in order for secondary inertia. It is of paramount importance to avoid if at all possible an exhausted, discouraged, heavily sedated woman in the early second stage of labor. The misconduct of the patient in the first stage of labor leads directly to exaggeration of difficulty in the second stage.

When one knows by pelvis mensuration which should be done at the time of the first visit and re-checked during labor if satisfactory progress is not being made, that one is dealing with a narrow pubic arch and small intertuberous diameter, one can anticipate possible mid-pelvic delay or arrest because the interspinous diameter will also be narrow and the side walls convergent. Mengert believes that there cannot be any significant mid-plevic contraction if the outlet is normal. Whether mid-pelvic difficulty develops or not will depend on the relative degree of mid-pelvic narrowing, size of head, adequacy of flexion, amount of moulding and efficiency of the labor.

Unless there are significant signs of fetal distress no interference should be carried out unless the membranes are ruptured and the cervix has been fully dilated, and preferably retracted, for from one to two hours. There is nothing magic about the one to two hour limit; if the pains are desultory, more time may be allowed or intravenous pitocin may be judiciously used. By this time in the majority of instances where available, pelvimetry would have been done in order to aid in assaying the pelvic adequacy. Regardless of whether this is available or not, the pelvic situation should be clinically carefully reevaluated, preferably by sterile vaginal examination. In some patients, a few deep breaths of trilene or N_2O-O_2 combinations will make this procedure more valuable.

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Marked moulding of the head should not lead one to consider that there is further descent than there really is. Many so-called low forceps are in reality low mid or even mid-forceps. This is particularly true in hospitals in which there are rules concerning who may or may not do what type of forceps delivery. Unless the skull is on the perineal floor, one is not doing a low forceps.

CARDINAL PRINCIPALS OF MECHANISM OF LABOR

In figuring any mechanism of labor there are two rules that should always be kept in mind. These are as follows: Rule I. The smallest diameter of the fetal head, the biparietal, usually passes through the narrowest diameter of the pelvis at any given level. Rule II. The occiput generally tends to rotate to the widest portion of the pelvis at any given level. If these two rules of thumb are kept in mind, the optimum means of effecting a satisfactory delivery is usually easily worked out.

It should be apparent from the foregoing discussion that most serious mid-pelvic difficulties occur in anthropoid or android pelves that have convergent side walls and a posterior engagement in the former and a posterior or transverse engagement in the latter. This brings us to the specific discussion of the obstetrical handling of deep transverse arrest and persistent occiput posterior.

DEEP TRANSVERSE ARREST

When there is anterior-posterior shortening and the sacrum is either flat or convex, the head usually engages in the transverse and stays transverse until the head is low enough so that there is room enough for it to rotate to the anterior. This cannot happen in the mid-pelvis because of the foreshortening. If the head can be brought down far enough into the pelvis, i.e., to the pelvic floor, anterior rotation usually occurs easily, particularly if there be no deflexion of the head. Attempts to rotate the head before this frequently leads to disaster as regards the infant, because one then usually substitutes for the narrowest diameter (biparietal) of the head a larger diameter. One should not partially disengage the head, rotate it either manually or with forceps and then attempt to deliver. If the head is low enough, manual rotation can be sometimes effected. If this is not easily accomplished forceps can be used if the mentioned criterion are present. Theoretically, the forceps of choice is the Barton. After attaining a proper application, gentle traction should be used without special effort to rotate. As descent occurs, rotation usually spontaneously takes place; if not, it can be partially assisted. In an occasional situation with a decreased anterior-posterior diameter of the outlet, delivery in the transverse position may prove to be the method of choice. Some observers champion the Kielland forceps in this situation, and they are perfectly satisfactory as long as one does not attempt anterior rotation too soon. It is not the selection of the forceps but the finesse of their utilization that is paramount. It cannot be stated strongly enough that this type of delivery tests the metal of the accomplished accoucheur. There should be no reluctance to admit an error in judgment. A "trial forceps" should be as its name indicates, a try. If there is difficulty in obtaining a good application of the forceps or progress cannot be readily obtained a cesarean section should be considered, provided the fetus is in good condition. There is no place for version and extraction in this situation for there is too high an incidence of serious fetal damage and uterine rupture.

If the arrest be in association with poor labor and the anterior-posterior diameters are adequate and there is a fetal indication for delivery, there is no reason why one cannot make a cephalic application of Simpson, or similar forceps, rotate the head anterior and deliver. Sometimes in this situation manual rotation to the anterior seems to be associated with a more effective labor and this may be all that is necessary.

The current status of mid-forceps for deep transverse arrest is undergoing critical re-evaluation. Supportive measures given during labor plus the intelligent use of high dilution intravenous posterior pituitary extract has been responsible in reducing the frequency of this procedure. The prohibitive fetal mortality and morbidity of difficult mid-forceps make cesarean section a much more intelligent choice, particularly when the mid-pelvic difficulties are real.

PERSISTENT POSTERIOR POSITIONS

Regardless of the exact percentage of vertices that engage in the posterior oblique or direct posterior, the huge majority of them rotate spontaneously to an anterior position. A posterior position is not of necessity an abnormal one. Calkins has emphasized this for years. The incidence of persistent occiput posterior is about 5 per cent. Anterior rotation is the rule in the gynecoid pelvis because there is ample room. However, in the anthropoid pelvis with its transverse narrowing throughout, internal rotation except to the direct posterior, is less likely to occur. There is some disagreement in regard to whether this type of engagement prolongs labor or not. It seems likely that if internal rotation through the 135 degree arc to an anterior position takes place that labor is not unduly prolonged. However, if rotation to the posterior occurs, labor is probably significantly longer.

As has been pointed out, deep transverse arrests do not usually begin as posterior. If there is sufficient room in the transverse diameter of the mid-pelvis for rotation to the transverse to occur there is usually room for rotation to the anterior to follow.

There are two main choices in the handling of delivery in a persistent occiput posterior in an anthropoid pelvis. These are rotation to the anterior or delivery as face to pubes. Various authorities champion each. It is probably best to elect the one that proceeds easiest in any particular situation. The rotation may be manual or with forceps. As a rule, the head will have to be pushed up before any type of rotation can be carried out. If forceps are used, this constitutes the so-called Bill's modification of the Scanzoni maneuver (double application of forceps). In doing a face to pubes delivery, a cephalic application of Simpson or similar forceps can be made. If progress is not readily obtained, anterior rotation should be considered. Regardless of the choice of management one should always remember that it is fundamental to apply the forceps in such a way as to augment or maintain flexion of the head. An extra wide episiotomy should be done, because the wider occiput is posterior. A central or midline episiotomy increases the chances of a third degree laceration.

Android pelves have a higher percentage of posterior engagements at the inlet than any other type of pelvis except the anthropoid type. This is due to the fact that there is a wide posterior segment. If the side walls of the android pelvis are straight, indicating an adequate transverse diameter in the mid-pelvis, anterior rotation will usually occur spontaneously. If it does not, one may use a cephalic application of Simpson type forceps and deliver face to pubes. This necessitates a deep episiotomy and one should be on guard against a third degree extension. Also one may push the head up until rotation is more easily accomplished, then rotate the head to the anterior manually or with forceps. Whether one uses Kielland type forceps or a double application (Scanzoni-like maneuver) depends on one's preference.

When one is dealing with a posterior in an android pelvis with converging side walls (funnel pelvis) with prominent ischial spines and narrow interspinous diameters, the situation is apt to be more critical. One may attempt either rotation to the anterior or delivery as a persistent posterior but unless progress is readily obtainable many would elect a cesarian section in this relatively unfavorable situation. For the same reasons mentioned previously, version and extraction have no application here.

SUMMARY

Mid-pelvic disproportion presents a most difficult obstetric problem. It is suggested that if the common mechanisms of development of deep transverse arrest and persistent occiput posterior are borne in mind that, when necessary, one can apply and manipulate forceps with a minimum of fetal head damage. Undue force is to be avoided. Version and extraction has no place in the handling of these situations Cesarean section should be elected before the infant is severely compensated. Obstetric judgment needs to be at its best in order to decide correctly if and when a cesarean section should be done. Fetal salvage will be increased if the proper decision is made.

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Case Reports

Black Widow Spider Poisoning

BARRETT L. TAUSSIG, M.D., and AARON HENDIN, M.D., *St. Louis*

THE BLACK WIDOW spider (Latrodectus mactans) is widely distributed in the Ohio and Mississippi valleys as well as in the southern states and the Pacific coastal region. Thorp and Woodson[1] have summarized the cases of spider bites in the United States—a total of 1,291 cases from the years 1726 to 1943 with fifty-five deaths. Missouri is notable for the number of these spiders. They are not infrequently seen in lumber piles, trash heaps, dark corners of woodsheds and garages and, perhaps most frequently, in outdoor privies. The poison which produces systemic symptoms is a toxalbumen which is discharged through a duct which opens near the tip of the claw-like structure with which the spider seizes its prey.

The signs and symptoms following the bite of the black widow are characteristic, though difficulty in diagnosis may be encountered if the history of the bite cannot be obtained. The severity of the symptoms is related to the amount of venom injected and to the size of the victim. From fifteen minutes to two hours following the initial pain of the bite there is the onset of severe muscular pain often starting in the groin and spreading centrifugally to involve the entire body. The pain is excruciating and may exceed that of a ruptured abdominal viscus or kidney colic. It is often most severe in the abdomen and back. The most striking physical findings include the apparent marked agony of the patient, his inability to sit still or lie down (in contradistinction to the patient with an acute surgical condition of the abdomen), and the extreme board-like rigidity of the abdomen, which, however, is not tender to palpation. Other symptoms and findings which have been described but are not invariable include convulsions, tachypnea, sensation of pressure in the chest, vomiting, excessive perspiration and salivation, delirium, cyanosis, insomnia, periorbital edema, increased tendon reflexes, increased spinal fluid pressure, hyperemia of the face, conjunctivitis, oliguria and albuminuria. Changes in temperature, pulse, respiration and blood pressure are variable. The acute symptoms usually subside in from six to forty-eight hours, but in severe cases may last for several days.

A considerable number of drugs have been used in the treatment of arachnidism. The opiates and analgesics have been noteworthy in their relative ineffectiveness in relieving symptoms. The use of intravenous calcium salts has become fairly standard as a therapeutic method, and immediate relief of pain following its use has been described.[2] Many observers have found its effects disappointing. Bell and Boone[3] describe improvement fifteen minutes after the injection of 2 cc. of 1:2000 neostigmine methylsulfate and virtual freedom from symptoms after an hour. Odom and Capel[4] on the other hand have found little benefit from the use of neostigmine, and, indeed, the rationale of its use is not clear. Curare-like drugs would seem to have a logical place in the treatment of arachnidism. Allen[5] has reported a case of a spider bite victim with a board-like abdomen and the back in opisthotonoid position who was slowly given 9 mg. of tubocurarine intravenously. Relaxation and relief of pain were almost immediate. Hormonal therapy has produced favorable results. Maretíc[6] observed amelioration of symptoms twenty minutes after the intramuscular injection of 80 mg. of cortisone. Cohen[7] reported two cases of arachnidism. One patient was given 50 mg. of cortisone by injection at four hour intervals. Within a few hours following the first injection there was considerable relief; following the third injection the patient appeared recovered. A second patient obtained marked relief thirty minutes after an intramuscular injection of a colloidal solution of ACTH. It is generally agreed that the best and only specific treatment is the use of antivenin (Antivenin Latrodectus mactans, Sharp and Dohme) in dosage of 2.5 cc., deep intramuscularly. A number of patients will require an additional dose.

The following case of arachnidism is reported because of the severity of the symptoms, the failure to respond to non-specific measures and the rapid recovery following the use of specific antiserum.

CASE REPORT

A 28 year old man was working in his garage on October 13, 1954. At about 7:00 p.m. he felt a stinging sensation on his right wrist. He brushed his wrist and forgot about the pain. Fifteen minutes later he noted cramping pain in the right side of his chest and also pain and spasm in his arms and legs. He went to see a chiropractor who manipulated his back and advised him to see a physician. At 9:30 p.m. he was seen in the emergency room of St. Mary's Hospital. At that time he appeared to be in acute distress. He was doubled up with pain. There was spasm of all the muscles of his extremities and rigidity of the abdominal muscles. There was a 5 cm. area of redness over the lateral aspect of his right wrist. He was given 25 mg. of benedryl intravenously without relief. He was then given 20 cc. of a 10 per cent solution of calcium gluconate and one fourth grain

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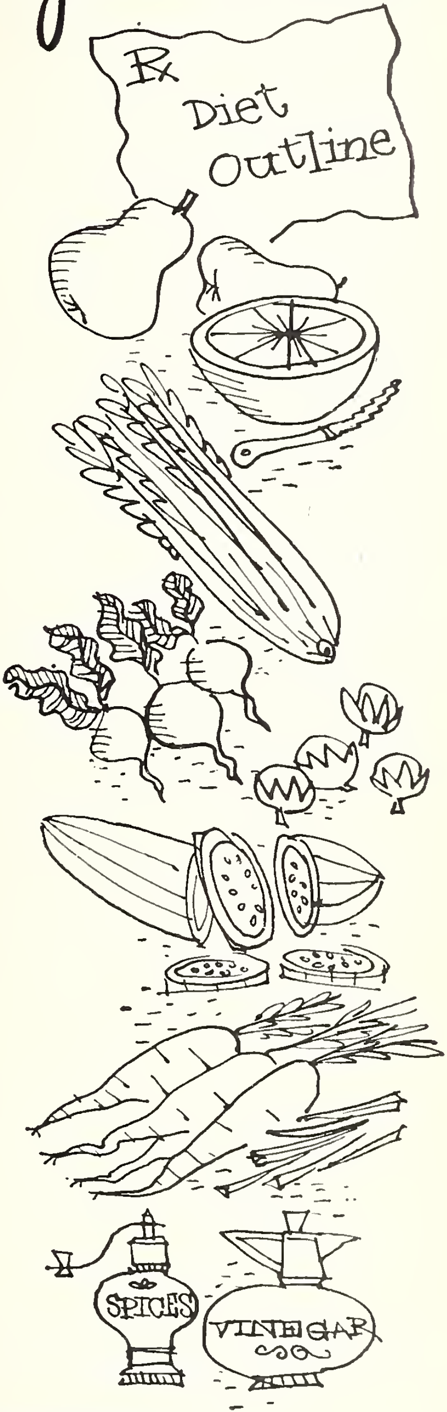

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of morphine with some relief. He was admitted to the hospital.

On admission to the ward his temperature was 99 F. degrees, pulse 66 per minute, respirations 16 per minute, blood pressure 120/65, height 68 inches and weight 124 pounds. The neurologic examination was normal and the other physical findings were as before.

On the following morning the severe abdominal cramps recurred. He still had a board-like abdomen, and there was one episode of vomiting. He then had nuchal rigidity and some periorbital edema. A coarse tremor of the extremities was present. Calcium gluconate and morphine were given with little if any relief. At 10:30 a.m. the patient was started on intravenous hydrocortone (100 mg. in 500 cc. of 5 per cent glucose). He was also started on oral cortisone (50 mg. every four hours). By late afternoon he had shown only slight improvement from this medication. At 8:00 p.m. he had again become much worse with abdominal cramps, nuchal rigidity and spasm and tremor of the extremities.

Laboratory studies on this day showed the urine to be normal, the Kahn negative, hemoglobin 14.4 grams, white count 16,400 with a slight left shift, and a normal red cell fragility. An electrocardiogram was normal except for sinus bradycardia.

At 8:30 p.m. some black widow spider antiserum arrived from Kansas City. The patient was given a test dose of horse serum. The test was negative and he was then given an intramuscular injection of 2.5 cc. of the antiserum at 9:05 p.m. By 10:30 p.m. he had shown marked symptomatic improvement. He no longer complained of abdominal cramping, and the nuchal rigidity and muscle spasm and tremor had disappeared. He slept restfully that night and required no further medication. On the following morning he was completely asymptomatic and all evidence of muscle rigidity had disappeared. His temperature, pulse and respiration were normal. He continued symptom free and was discharged from the hospital on October 18, 1954.

COMMENTS

The severity of this patient's symptoms was undoubtedly in part related to his asthenic habitus and small body weight. He may have received a dose of poison which was unusually concentrated in his comparatively small muscle mass, a dose which might have been better tolerated by a larger person. He failed to improve not only following the use of traditional procedures, but also after administration of adequate quantities of adrenocortical hormones. At that time it seemed possible that the outcome might be fatal. The rapid recovery following the use of antiserum emphasizes the fact that it is the most reliable and the only specific form of therapy. It also emphasizes the importance of the antiserum being readily available since, although it may not be frequently required, it may be life-saving when it is needed.

SUMMARY

A case of black widow spider poisoning is reported. The patient failed to respond to all nonspecific measures, but made a rapid and complete recovery following the use of specific antiserum.

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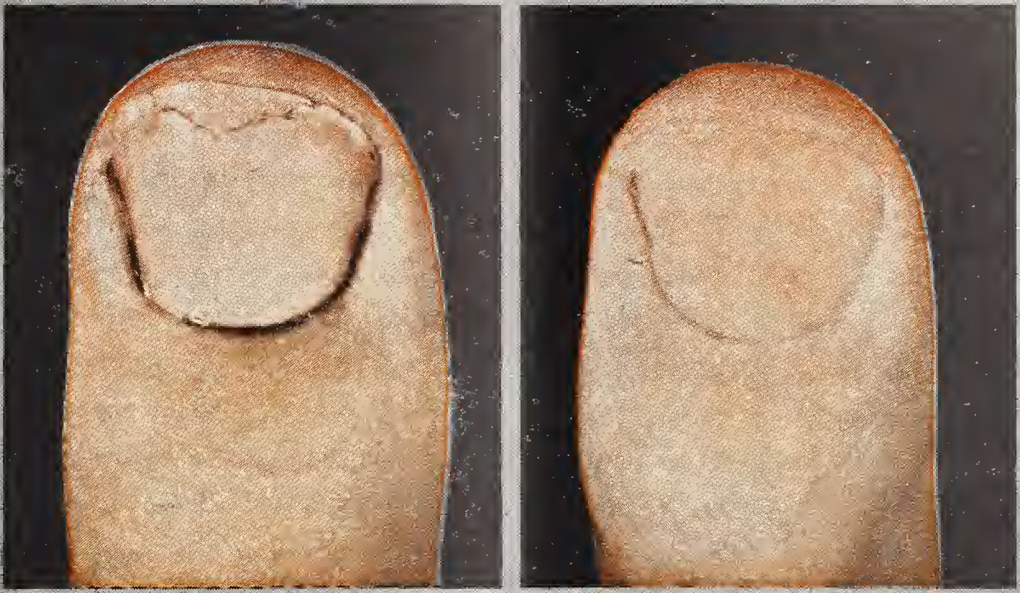

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THOMAS F. B. DARNELL, M.D., *Columbia*

INTRADERM SULFUR Solution (Wallace Laboratories) has been used for several years in the treatment of acne vulgaris. A report on its use for this was by MacKee *et al.* in 1945.

In the last several months, I have used the full strength Intraderm Sulfur Solution on two cases of multiple verrucae planae. I had previously used this on another case in 1953. The Intraderm Sulfur Solution was applied once or twice daily to the warts until the skin was red, scaling and markedly irritated. The solution was then discontinued until the scaling and redness disappeared. Then the solution was again applied until the skin was irritated. This procedure was continued until the warts were no longer present.

REPORT OF CASES

Case 1. D. M., a white male, aged 5, was first seen in the office October 23, 1954. He had been treated previously for several months by another dermatologist in another city. Treatment was evidently by sulfur solutions and other medication in the form of drops. At the time of the child's first visit to this office, numerous flat warts were noted over the chin. Intraderm Sulfur Solution was prescribed. The child's last visit to this office was December 4, 1954, at which time all flat warts on the chin were gone. Skin of the chin was then perfectly normal.

Case 2. N. H., a white female, aged 18, was first seen in this office on January 13, 1955. At that time she had numerous flat warts over her chin and a few on the forehead. This patient had also been treated for several months by another dermatologist in another city. The patient stated that sulfur solutions had been used in this treatment. On the date that I first saw this patient, she was given a prescription of Intraderm Sulfur Solution and directed as to its use. Her last visit to this office was on February 15, 1955, at which time all flat warts had completely disappeared.

Case 3. G. H., male, white, aged 14, was seen first on June 15, 1953. There were numerous flat warts on each anterior forearm. He had not been treated previously for this. Treatment with Intraderm Sulfur Solution was begun immediately after his first visit to my office. On August 3, 1953, all but three or four verrucae had disappeared. His last visit to me was on December 18, 1953, for another dermatosis. At that time there were no remaining flat warts.

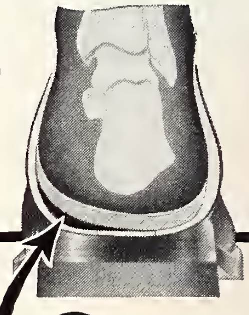
I have successfully used this same solution for treatment of the recalcitrant, discrete, semi-acute type lesions of tinea corporis. Also several cases of tinea corporis, of the type due to Trichophyton purpureum, were treated with Intraderm Sulfur Solution. None was cultured. One case cleared completely within two months and remained clear or clinically cured at the end of six months. The several others treated showed no change due to treatment by this solution.

COMMENT

Intraderm Sulfur Solution is another preparation that is particularly useful in the treatment of verrucae planae and some superficial dermatomycoses. It was curative in a small series of cases of verrucae planae. It is apparently as good and may be better than other preparations (especially sulfur preparations) in the treatment of verrucae planae. It has potentialities in the treatment of superficial dermatomycoses.

909 University Ave.

MacKee, G. M.; Wachtel, J.; Karp, F. L., and Hermann, F.: The evaluation of "intraderm sulphur" for acne vulgaris, J. Invest. Dermat. 5:309-322 (October) 1945.



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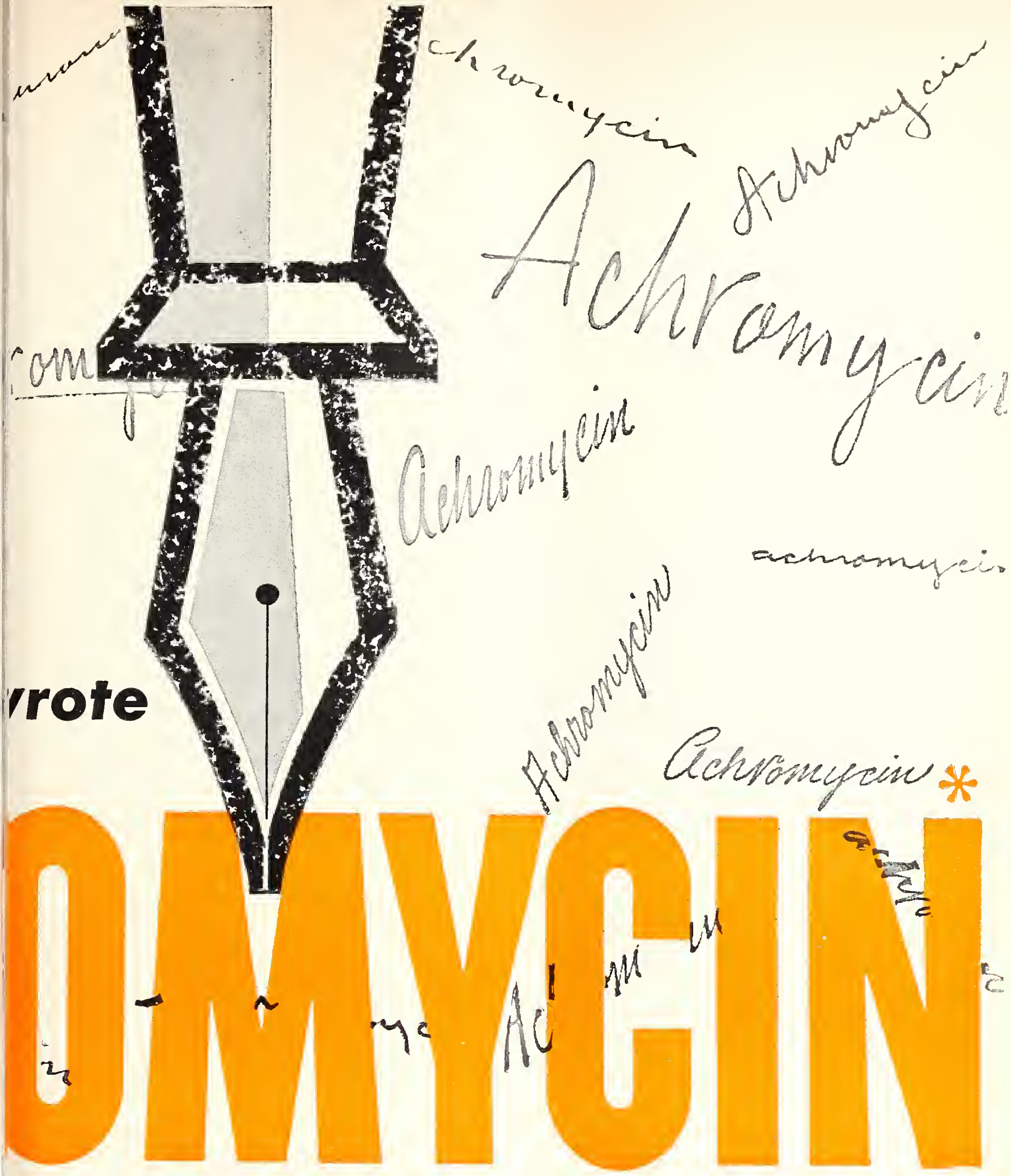

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Special Article

Paying for Economic Security—

Through Voluntary Individual Action

MR. POWELL B. McHANEY, *St. Louis*

PERHAPS THIS subject could be paraphrased as "Economic Security Through Voluntary Individual Action Is Best." At least, as so stated, I firmly believe in my subject.

What do we mean by economic security? For our purpose, it means protection against financial hazards that most every person faces in the course of his lifetime—certainly every working person. There are many such hazards, but in the life insurance business they are grouped into four major categories. They are:

1. The hazard of "dying too soon" and leaving one's family and dependents without sufficient financial resources to carry on.
2. The hazard of "living too long" in the sense that one may reach old age without having the financial resources to sustain himself or his dependents.
3. The hazard of unemployment.
4. The hazard of disability through accident or illness with resultant stoppage in income and oftentimes crippling costs of medical care and hospitalization.

There are many ways that men, through their voluntary efforts, protect themselves against these financial hazards. Most of these means require thrift, skill and time—time to accumulate a sufficient fund to protect against the hazard.

SAVING

Saving—accumulation—is the cornerstone of economic security through voluntary individual action. We are a tremendously wealthy country. Personal savings were running at an estimated annual rate of $18.5 billion during the first three months of 1955. These savings are not net savings in the sense that they are available for investment, as a certain amount is "committed" for the payment of previously incurred debt and other contractual obligations. Nevertheless, the American people have tremendous sums of money over and above taxes and living expenses which may be retained in the form of cash savings or placed in various types of investments, including insurance, in an effort to build up their financial resources and thus obtain economic security.

The estimated liquid assets held by individuals at the end of 1953 totaled $379.9 billion. These assets were divided into currency and bank deposits estimated at $147.9 billion, savings and loan associations estimated at $22.9 billion, government securities of $81 billion, government insurance reserves of $51.6 billion, and private insurance reserves of $76.5 billion. Individual indebtedness for mortgage loans and consumer credit was estimated at $79.9 billion. This leaves net liquid assets of approximately $300 billion in the hands of individuals.

This $300 billion does not include individuals' holdings of corporate securities. Unfortunately, no reliable information is available on the value of corporate stocks and bonds owned by individuals. However, Mr. G. Keith Funston, President of

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President, General American Life Insurance Company.
Member of the Board of Curators, University of Missouri.
Substance of a paper presented before the 43rd Annual Meeting, Chamber of Commerce of the United States, May, 1955.

Reprinted by permission from *American Economic Security*, May-June, 1955.

the New York Stock Exchange, in his recent testimony before the Committee on Banking and Currency of the United States Senate, stated that around 7½ million individuals owned shares of publicly owned corporations.

These totals of savings by individuals are indicative of the efforts made by the people of this country to obtain economic security through their own voluntary action. The range of those who seek economic security by their own efforts, ability and frugality extends from the man of extreme means worth many millions of dollars to those on the subsistence level.

LIFE INSURANCE

But some men have not had the time to save an adequate amount for protection. Others for various reasons, including high taxes and high costs of living have not been able to accumulate enough resources to guard against the unknown financial hazards of the future. "Life insurance" gives immediate protection. The insurance principle eliminates the time element. Only by using the insurance principle can one who does not possess sufficient funds give immediate economic security to his family. And that causes us to consider the widespread coverage of life insurance.

It is estimated that today over 93 million Americans own $339 billion worth of life insurance. The resources of the companies through which these individuals have provided this type of protection for themselves and their families exceeds $84 billion. With only about 7 per cent of the world's population, the people of the United States and Canada own more than 75 per cent of the world's life insurance. It can truthfully be said that the business of life insurance touches the lives, the plans and the hopes of four of out of every five families in America. It is this mechanism which, when added to all the other forms of capital accumulation, makes us truly a nation of capitalists.

While protection against death is and must always remain the primary function of life insurance, more and more, as one life insurance company advertises, "Life Insurance Is For The Living." And this suggests a discussion of how well private individual efforts, without the assistance of government, are meeting the second financial hazard—the hazard of living too long.

In this area, all of the methods of individual savings that have heretofore been mentioned combine in providing protection. As nearly as can be determined, about two thirds of all the pension and retirement programs approved by the Bureau of Internal Revenue are underwritten by insurance companies. The other one third are called "trusteed" plans; that is, the funds on deposit are invested and administered, and the benefits paid by trustees, rather than guaranteed and paid by insurance companies. Through insurance companies alone, about 5½ million individuals have retirement benefits which involve a total annual guaranteed retirement benefit of $2.2 billion. They, plus the uninsured pension plans, plus all of the permanent life insurance in force, with its cash surrender and maturity values, plus all of the savings accounts, the securities and other investments of people are the true measure of the degree to which the American people by their own prudence, foresight and thrift have provided for their needs in old age.

That the American people are providing and desire to continue to provide for themselves is indicated by the fact that ordinary insurance has increased by 184 per cent since 1935; that since 1935 the total number of annuity contracts alone has increased by 364 per cent; that since 1935 savings accounts in mutual savings banks have increased by 169 per cent, and by the fact that in fifteen years assets of savings and loan associations have increased 466 per cent.

All of these various types of savings that have been referred to in connection with the hazards of dying too soon or living too long also provide a buttress against the third threat—the hazard of unemployment. The $300 billion of personal net liquid savings, in addition to the other economic functions they perform, are the privately provided unemployment insurance of those who have the opportunity, the foresight, and the desire to become and remain self-sufficient.

HOSPITAL AND MEDICAL COVERAGE

And now let us turn to the most spectacular growth record in the entire field of private personal economic security—protection against the hazard of physical disability and its resultant costs. This type of coverage is provided primarily through insurance companies but also to a substantial degree by hospital and medical service plans like Blue Cross and Blue Shield, by employee mutual benefit associations, by the "self-insured" plans of employers and labor unions, by the trusteed welfare plans of both employers and unions and by cooperative associations.

According to the Health Insurance Council, 103 million people today have health insurance. In twenty-five years, the number of Americans covered by hospitalization insurance has multiplied 17 times.

Eighty-eight million people are now insured for surgical protection. In 1940 the figure was less than 5½ million.

Growing faster percentagewise than either hospitalization or surgical procedures protection is medical care insurance. Forty-seven million people now have this form of coverage. Only ten years ago the figure was less than 4 million.

And now there has emerged the newest established branch of health insurance, major medical or catastrophe insurance. Already well over 1 million Americans have this form of protection and the number is growing daily.

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The oldest branch of the voluntary health insurance industry is the protection against loss of income. According to the Health Insurance Council, about 38 million workers, three fifths of the civilian labor force of the United States, have loss of income protection.

This record of growth, unexceeded in the insurance business, is concrete, specific and demonstrable evidence of the acceptance by the general public of the philosophy that the hazard of accident or illness should be provided for by voluntary self-protection. It is proof that the private enterprise way is working and working well in the field of health insurance as it has always worked in the field of life insurance.

THE "UNINSURABLES"

But someone will no doubt say, "All of that is very good but there are certain people in our country today who are uninsurable and cannot insure themselves against the hazards of death and accident and sickness and there are other people who have not the ability to pay for such insurance. Shouldn't these people have protection and, if private carriers will not furnish it as they can't, then why shouldn't government furnish such protection through a comprehensive Social Security program?"

I wish it were possible to provide insurance coverage of all types for all of our people with rates within the reach of all of them, but obviously that cannot be done. There are some people who cannot afford adequate medical care under today's conditions. There are some people who cannot pay a life insurance premium or the premium for any part of a retirement program. Obviously, private insurance companies cannot furnish such protection to such people under the principles of sound operation, but equally obvious, is the fact that the problem of poverty is the problem of society as a whole, whether a person affected by poverty be taken care of by the government or by charity.

Direct relief and assistance to our needy citizens is currently recognized as the responsibility of our local communities and state governments. Let the federal government, if necessary, assist as it has in other areas of individual need through federal grants-in-aid, but let it not disguise this proper governmental role by garbing it in the protective cloak of governmental insurance. Let the formula for governmental assistance against these hazards rest where it belongs—on need and need alone.

If there are people who think contrariwise—and there are—they should be reminded that oftentimes the remedy causes results that are worse than the thing to be remedied, and so it is with any further extension of the so-called social insurance program. Note use of the word "further" for it may astound one to know that the life and survivorship benefits of the present Social Security program total more than all of the life insurance in force in all of the private companies today. This does not include benefits to veterans or other special life and survivorship programs of the government.

SOCIAL SECURITY

This article will not discuss in detail the inequities and fallacies and the tremendous ultimate cost of the present Social Security program of the federal government. That has been ably done by others. But it is important to point out these facts about our present Social Security system—facts that only would become more pronounced if we are to further extend the system:

1. First, it is a "ready-made" political football to be used by either party. There can be no question but what both political parties have used it as a means of incurring favor with blocks of the American public. Since the Social Security Act was first enacted nineteen years ago, the benefit formula has been changed no less than four times. Originally the act was sold to the public as a means to prevent destitution. Today, it has gone far beyond that.

2. While referred to as social insurance, the present Social Security program is not insurance, but a program of government subsidy paid for by taxpayers without relation to benefits obtained. Many persons today are receiving Social Security benefits in excess of $100 per month. They have paid only an infinitesimal part of the cost of such benefits. The balance of this cost must come from the taxpayer, the worker who has Social Security taxes deducted from his paycheck and his employer who matches the amount of money paid by the employee. As more and more people reach age 65—and they will with modern science being what it is—the cost will grow and grow until it may become impossible to support the program. It has been said by competent authority that, if the government were required to maintain adequate reserves to meet its present liability under the Social Security program (assuming that the present benefits are guaranteed), it would be required to have $200 to 250 billion instead of the $20 billion that it presently possesses. In other words, gauged by standards comparable to life insurance companies today, the governmental debt of $277 billion is actually at least $477 billion today. Now that statement would be accurate if the benefits of O.A.S.I. were guaranteed, but they are not—and that is something the American public is not aware of. Will *the worker of tomorrow*

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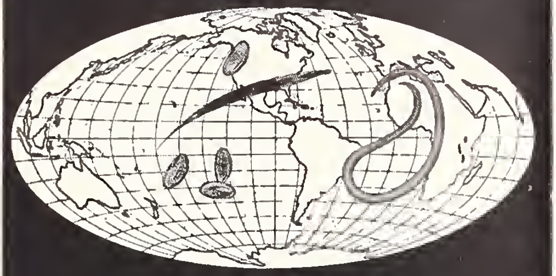

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stand still for the tremendous burden of taxation that may go up to 8 to 12 per cent of taxable payrolls or higher in order to pay *us* our Social Security when *he* himself will not know whether or not the generation that follows *him* will be willing to pay the tremendous costs of *his* Social Security?

Apparently there are some members of Congress who do recognize the future implications of our present Social Security system and are seeking ways and means of encouraging private thrift in this area. Witness two bills presently pending in Congress. The first proposes to encourage people to provide for their own security by allowing tax deductions for premiums paid on annuity and life insurance contracts. The second seeks to achieve the same end by exempting from Social Security taxation and benefits those who are eligible for similar benefits under private plans. These are deserving of the most serious consideration for they give concrete recognition to the fact that private savings are preferable to government grants.

Why is Economic Security Through Individual Action best? We have seen from these necessarily sketchy statistics of the size and growth of individual efforts to achieve private economic security how enormously the American people operating within the framework of private enterprise are seeking to protect themselves. Why do such efforts deserve support and encouragement? And why should we discourage further encroachment by government into the field of personal economic security?

The reasons are both material and spiritual.

ECONOMIC SECURITY THROUGH INDIVIDUAL ACTION

Under our present economic system our people set aside a part of their current income for savings. To that extent, these funds do not enter the market for consumer goods and the inflation potential is thereby reduced. This is sound economics in a system founded on enterprise and competition. It tends to hold current prices in line, leads to improved methods of production which increase the standard of living.

Even more important, from a material standpoint, the savings of the people are the source of the capital which underlies the huge productive capacity of this nation. The constant and continuous growth in productivity has made possible for our citizens the world's highest standard of living. If the incentive to save is eliminated because government takes over the protective functions of private savings, then the pool of private capital which feeds the springs of future growth will dry up. Millions of people engaged in the capital goods industries would become displaced persons—without jobs. And they would shortly be followed by millions in other industries, all of whom would have to look to government to employ them. For government would then become the only source of capital. To obtain this capital, government must either appropriate the private property of its citizens directly or through taxation.

Expropriation means a socialistic state and the end of personal liberty. The same result can also be achieved through the process of high taxation which approaches confiscation of private wealth. Stagnation and dictatorship are the end result of either.

Thus it is that from a material standpoint, for the sake of our own selfish comfort, for the maintenance and betterment of our standard of living, the provision for our economic security through private means, rather than government means, is essential.

The spiritual implications are even more convincing. In a state where every possible contingency that threatens personal security is to be provided for by the government, there is little need for initiative. There is little use for courage, for vision, for self-reliance. When there is little need for these human qualities, they shrivel and fade away. We become creatures without dignity, without self-respect—drudges, devoid of ambition, and of personality. We become robots whose aspirations are limited to performing our assigned duties day-by-day in order to obtain a daily quota of food and clothing.

It is the inescapable lesson of history. It has happened before. It can happen again. The surest insurance against it is the process of personal saving.

The process of saving is absolutely necessary to the continuation of personal freedom. That is the basic reason—the most conclusive argument that private security through individual efforts is best—that it must be encouraged and fostered and that it must never be ceded or traded to government.

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Bumbalo, T. S., Gustina, F. J., and Oleksiak, R. E.:
J. Pediat. 44:386, 1954.

White, R. H. R., and Standen, O. D.:
Brit. M. J. 2:755, 1953.

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Brown, H. W.:
J. Pediat. 45:419, 1954.

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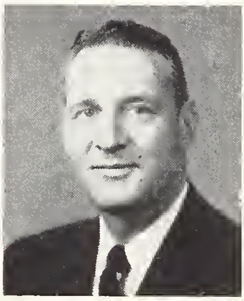
President's Page

An editorial "Disability in Social Security" appeared in the August issue of Missouri Medicine, page 638. I wonder how many members read it.



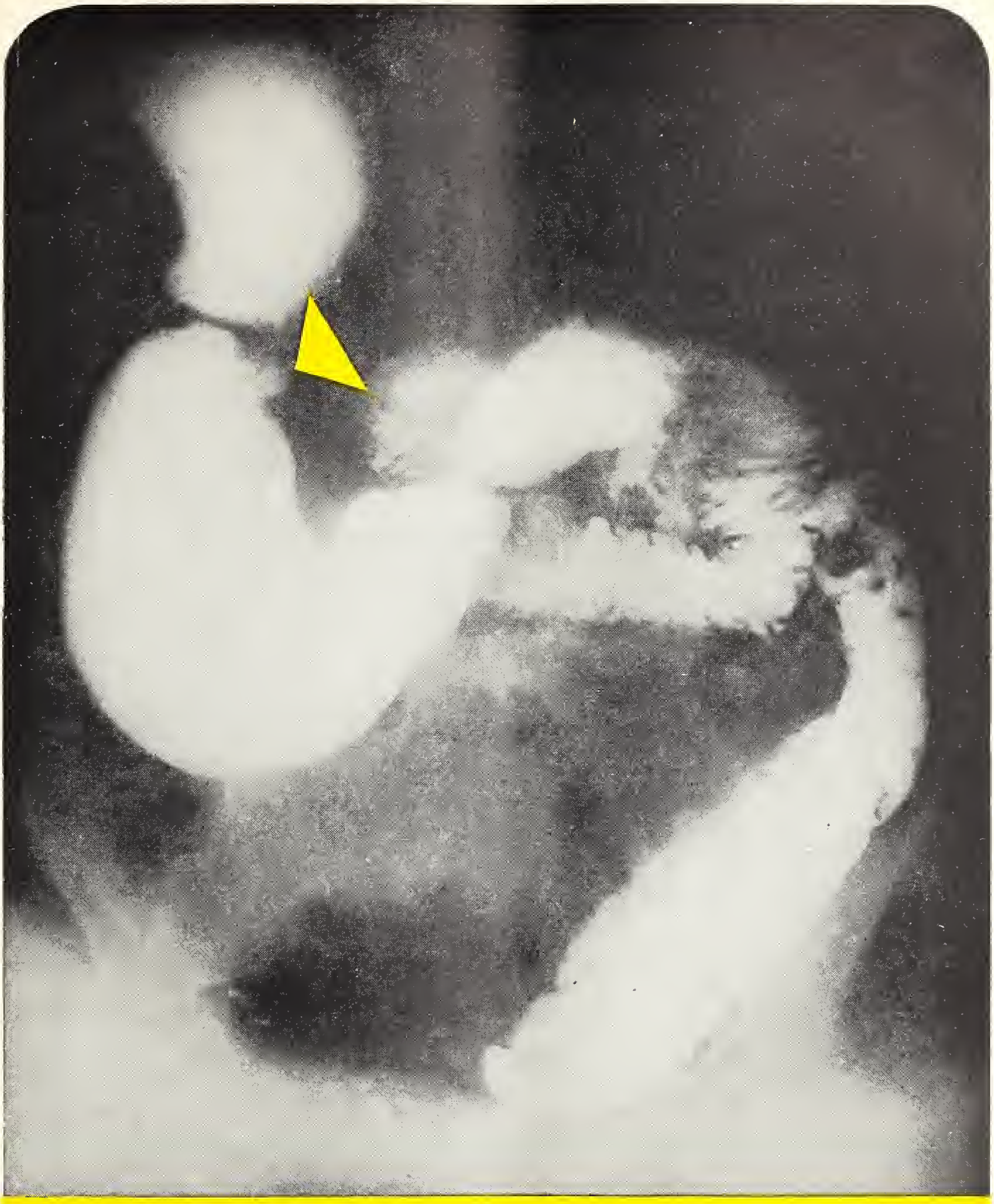
The legislation to provide cash payments to the disabled, beginning at age 50, is contained in H. R. 7225. This bill was passed by the House of Representatives on July 19. It has been referred to the Senate Committee on Finance. The Chairman of that Committee, Senator Byrd of Virginia, has indicated that the Senate Committee will conduct full hearings on this legislation.

All members should become familiar with this legislation. An editorial, "National Compulsory Disability Benefits," appears on page 1032, *Journal of the American Medical Association*, July 23, 1955. And another article in the same issue, pages 1133 and 1134, "The Outlook for Social Security," written by A. L. Kirkpatrick, provides some real food for thought.

Representative Thomas B. Curtis, St. Louis County, was the only Congressman from Missouri who opposed this piecemeal approach to the socialization of medicine.

I wish to close this with a statement which appears in the editorial in the *Journal of the American Medical Association* mentioned, "The distance between our present medical freedom and complete government regimentation has narrowed considerably. The remaining gap will be closed completely unless physicians throughout the nation take constructive action to educate themselves, the public and their Congressmen and Senators during the next few months."

Missouri Senators Thomas C. Hennings, Jr., and Stuart Symington may be reached at Senate Office Building, Washington, D. C.



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EDITORIALS

Tax Postponement for Self-Employed

The President, Dr. Buhler, commented upon the Jenkins-Keough bills in the August issue of Missouri Medicine.

The House Ways and Means Committee on July 19 reported "Do pass" the "Individual Retirement Act of 1955," H. R. 10, with the following amendment: (1) The bills application is limited to those defined as self-employed in the Social Security law, plus physicians and Christian Science practitioners. (Note, physicians are not included under the Social Security law.) (2) The alternative forms of investment were amended to provide three choices instead of two as under the bill. These alternative forms are (a) a restricted retirement annuity fund; (b) a restricted retirement annuity contract, and (c) a life insurance annuity contract to the extent that the premium is allocated to the annuity. The maximum amount that could be excluded in any taxable year was reduced from $7,500 to $5,000 and the lifetime exclusion was reduced from $150,000 to $100,000.

If H. R. 10 becomes law, a physician may set aside $5,000 or 10 per cent of his income, whichever is greater, to purchase an approved retirement annuity. The money set aside would be deductible from federal income tax during premium paying years. When the retirement annuity matured, federal income taxes would then be payable on the annual income received from the annuity.

The bill has a long way to go before final passage. It has cleared the first hurdle; namely, the House Ways and Means Committee. It must then pass the House and finally the United States Senate. All Missouri Congressmen and Senators will have an opportunity to vote upon H. R. 10. If members are interested in the passage of this legislation, a letter to your Congressman and Senators may help to bring favorable action.

T. R. O'Brien

Democracy?

On June 28 the House of Representatives, by a vote of 221 to 171, extended the doctor draft for an additional two years. Within a period of two hours the Senate approved the bill. The measure was then sent to the White House three days before its expiration date.

The fast and furious action of our national legislature reminds us of the patient who, on having an attack of acute appendicitis, suddenly decides to get it over with by taking a good shot of castor oil instead of consulting his family physician.

Bipartisan House leaders supported the discriminatory measure. Chairman Vinson of the House Armed Services Committee jetpropelled the issue through the House. He insisted the doctor draft was the only way to provide adequate medical care for the armed services. If his words ring true then why does not he make military medicine more attractive as a career? Why discriminate and select one specified group for subjection to involuntary servitude? I wonder if any other group leaders would tolerate this breach of liberty, particularly in the field of labor? Chairman Howard Smith of the House Rules Committee led the fight against the socialistic idealogists, but to no avail.

The measure has become the law of the land. If you are over 26 and under 46 years of age and, I almost forgot, you must be a physician, then you and only you are a candidate for the peacetime armed services. You must close your office, bid goodbye to your wife and family, and let your debts ride. You do have one recourse, however. Write the A.M.A. and find out how your Congressman and Senator voted and pass the word around at the next election. A peace time discriminatory draft is not consistant with democracy, or is our concept of democracy changing?

Martyn Schattyn, M.D.

Evaluation of Drugs

The Council on Pharmacy and Chemistry of the American Medical Association has announced a new program to give physicians timely information on the usefulness and safety of new drugs. The Council discontinued its program of "seal-acceptance" in February of this year. This had become more a matter of evaluation of individual brands rather than of classes of products.

In the new program the Council will examine available published and unpublished evidence relating to the actions, uses, dosages, hazards and other properties of drugs but will not conduct clinical and laboratory tests.

After Council members and other recognized experts have considered the scientific clinical and laboratory evidence, evaluation reports will be published in the *Journal of the American Medical Association* and in the annual publication, "New and Nonofficial Remedies." Companies will have opportunity to comment before publication.

One + One = A Family

WHEN it comes to prepayment for health care, two people add up to a **family** in the amount of hospital and medical care they use.

But when the children are grown up and gone, many a Blue Cross and Blue Shield member writes, "It's just the wife and me now. Shouldn't we pay **less** money, now that there are just the two of us?"

The truth is that this couple . . . now in their middle years . . . will use **more** hospital and medical care than the younger family group with children. Their hospital stays are longer and more frequent . . . their illnesses more serious . . . their care more expensive.

Doctors can be of great help by explaining to patients that for both the young and old, one plus one equals a family . . . and that for the best in family coverage, millions choose BLUE CROSS AND BLUE SHIELD.

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Missouri Medical Meetings

Mississippi Valley Medical Association, Annual Meeting, Jefferson Hotel, St. Louis, Sept. 28-30, 1955.
Kansas City Southwest Clinical Society, Annual Meeting, Municipal Auditorium, Kansas City, Oct. 3-6, 1955.
Second Annual Southeast Missouri Cancer Conference, Cape Girardeau, Oct. 6, 1955.
Clay County Medical Society Annual Clinical Conference, Elms Hotel, Excelsior Springs, Nov. 3, 1955.
Missouri Heart Association Postgraduate Course, Camdenton, Nov. 10-11, 1955.
Missouri Academy of General Practice, Annual Meeting, Governor Hotel, Jefferson City, Oct. 26-27, 1955.
Missouri State Medical Association, St. Louis, April 8-11, 1956.
St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.
Barton-Dade County Medical Society—third Wednesday of each month.
Benton County Medical Society—meets only on call.
Boone County Medical Society—first Tuesday of each month.
Buchanan County Medical Society—first Wednesday of each month.
Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.
Callaway County Medical Society—third Thursday of each month.
Cape Girardeau County Medical Society—first Monday of each month.
Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.
Clay County Medical Society—last Tuesday of each month.
Clinton County Medical Society—meets only on call.
Cole County Medical Society—first Monday of each month.
Cooper County Medical Society—first Monday after the 15th of each month.
Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.
Dunklin County Medical Society—first Tuesday of each month.
Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.
Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.
Greene County Medical Society—fourth Friday of each month.
Henry County Medical Society—meets only on call.
Holt County Medical Society—meets only on call.
Howard County Medical Society—meets only on call.
Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.
Jasper County Medical Society—second Tuesday of each month, September through May.
Jefferson County Medical Society—meets only on call.
Johnson County Medical Society—meets only on call.
Laclede County Medical Society—second Monday of each month at 6:00 p.m., at the Louise Wallace Hospital, Lebanon.
Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.
Lewis-Clark-Scotland County Medical Society—meets only on call.
Lincoln-St. Charles County Medical Society—third Thursday of each month.
Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p.m.
Miller County Medical Society—meets only on call.
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.
Moniteau County Medical Society—second Thursday of each month.
Newton County Medical Society—meets only on call.
Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.
North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.
Pemiscot County Medical Society—third Thursday of each month.
Perry County Medical Society—second Thursday of each month.
Pettis County Medical Society—third Monday each month September through May.
Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.
Pike County Medical Society—third Tuesday of each month.
Platte County Medical Society—meets only on call.
St. Louis County Medical Society—second and fourth Wednesday of each month.
St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.
Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.
South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.
Vernon-Cedar County Medical Society—meets only on call.
Webster County Medical Society—meets only on call.
West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

Even in administering a physicians' placement service, knotty problems are found. It looks simple just to compile a list of physicians who contact one seeking locations; then, send a copy of this list to all communities, or individuals in those communities, who are seeking additional doctors. Fortunately or unfortunately, there is a bit more to it than that.

When does a community actually need another doctor? Will it support one? Can a physician practice good medicine in a particular place? Will professional cooperation be given a new doctor? Will not a doctor usually expect a physicians' placement service to know, within reason, the answers to most of these questions? All right, but where does the placement service get valid answers? Herein lies one of the persistent problems.

Incidentally, the wives of many physicians prospecting for locations, seem to have certain ideas about where they want to live, and problems of placement "pop up" in this respect.

One of the most vexing and wide spread problems, related to physicians' placement assistance, comes from the failure of physicians, receiving placement service assistance, to notify the service when they select a location. When a doctor contacts a state or county medical society for location service and is placed on the list, is it not reasonable to ask that he notify the service when and where he selects a location? Until the placement service receives this information, by "hook or crook," his name remains on the active placement list and continues to be given to communities requesting additional medical manpower, and to other physicians or groups seeking associates. These communities or physician groups may spend considerable time, trouble and money in contacting a physician on the list only to find he has already selected a location. Poor public relations for the entire profession is usually the result of a situation of this nature.

The director of an effective physicians' placement service in one of our neighboring states has been so plagued with this particular problem that he has written the deans of the two medical schools in his state, pointing out numerous instances in which young physicians using the placement service gave no cooperation in notifying the service when or where they located. He cited instances of adverse community reaction when, after receiving a list from the service, the communities wrote numerous ones and did not even receive the courtesy of a reply. Sometime later, it was discovered these young physicians had already selected locations. However, they failed to notify the placement service and answer the letters from these latter communities seeking their services.

The director of the placement service just mentioned, is seeking the answer to what can be done about physicians asking assistance from the service but will answer communications from the service or communities, so that they may be dropped from the list as located or continued on the list as seeking a location.

UROLOGICAL SOCIETY MEETINGS

The Kansas City Urological Society will hold meetings in the Pine Room, Kansas City Union Station, during the 1955-1956 season. The dates and programs follow:

September 28, 1955: "Kidney Transplants," R. W. Stockton, M.D., and George Aaron, M. D., Kansas City.

October 26, 1955: "Uretero-Pelvic Obstructions," Walter Mau, M.D., and James A. McClure, M.D., Topeka, Kansas.

November 30, 1955: "Experience With the Johanson Procedure," James Cope, M.D., Columbia, and Robert B. Bristow, M.D., St. Joseph.

January 25, 1956: "Hemoglobinuric Nephrosis," Laurance C. Johnson, M.D., Kansas City, and Herbert Warres, M.D., St. Joseph.

February 22, 1956: "Tuberculosis of the Kidney," Ronald W. Stitt, M.D., Kansas City, Kansas, and Ira T. Smith, M.D., Kansas City.

March 28, 1956: Special Meeting, Guest Speaker for Urological Seminar.

April 25, 1956: "Endoscopic Extraction of Ureteral Calculi," James F. O'Malley, M.D., and Stoughton F. White, M.D., Kansas City.

DEATHS

Leslie, Walter L., M.D., Russellville, a graduate of the Washington University School of Medicine, 1906, honor member of the Cole County Medical Society; aged 76; died June 18.

Pieper, Henry G., M.D., St. Louis, a graduate of the Marion-Sims Beaumont Medical School, 1903; member of the St. Louis Medical Society; aged 76; died July 25.

Trader, Charles B., M.D., Sedalia, a graduate of the Kansas City Medical College, 1901; honor member of the Pettis County Medical Society; aged 85; died July 21.

Key, J. Albert, M.D., St. Louis, a graduate of Johns Hopkins University School of Medicine, 1918; member of the St. Louis Medical Society; aged 65; died August 6.

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Members in the News

A dinner was given for **L. D. Greene**, M.D., Richmond, as a surprise on his 88th birthday on July 17. Present at the celebration was his daughter, who gave the dinner, his son, two brothers and a sister.

John Killion, M.D., Portageville, accepted a professorship in the student health department of the San Diego (California) State College and began his duties there in August.

Superintendency of the Jasper County Tuberculosis Hospital was resigned by **R. L. Laney**, M.D., Webb City, effective July 1 after serving since November 1953. He is succeeded by George Hobbs, M.D.

A public reception, which more than 400 attended, was held in Ridgeway on June 26 to honor two Ridgeway High School alumni, one of whom was **Lake Brewer**, M.D., who has practiced in Ridgeway for more than forty years.

Elected president of the Fairfax Community Hospital staff at a meeting in June was **Isaac F. Sweaney**, M.D., Oregon. **Edward F. Bare**, M.D., Tarkio, was elected vice president, and **M. J. Murphy**, M.D., Fairfax, was elected secretary.

About one hundred persons attended a meeting of the Greater Kansas City Mental Health Foundation on June 21 at which **Henry V. Guhleman, Jr.**, M.D., Jefferson City, discussed mental health legislation passed by the General Assembly.

President of the Washington University School of Medicine Alumni Association, elected at a recent meeting, is **Paul O. Hagemann**, M.D., St. Louis. Other officers elected were **Lee B. Harrison**, M.D., vice president; **Ernest T. Rouse**, M.D., secretary-treasurer; **Wendell G. Scott**, M.D., representative to the Washington University Alumni Federation Board.

A guest speaker at a meeting of the Missouri Association for Retarded Children, held in Kansas City June 27 and 28, was **Albert Preston, Jr.**, M.D., Kansas City.

The Missouri Association for Retarded Children reelected **Cecil G. Leitch**, M.D., Kansas City, at a meeting on June 27.

Effective July 1, **William F. McDarthy**, M.D., Blue Springs, became Health Director of Jackson County. He succeeds **Cecil G. Leitch**, M.D., resigned.

Honor was paid **J. W. Lindsay**, M.D., Conway, at a reception at the Conway High School on July 11, marking the completion of fifty years of medical practice and community service. Two members of his medical class were in attendance at the reception and a number of Missouri physicians, among them **James R. Amos**, M.D., Jefferson City, Dr. Lindsay's nephew. The reception and program were sponsored by the Conway Lions Club.

The bronze star medal for meritorious achievement while serving as chief of thoracic surgery in a Tokyo Army Hospital has been awarded **Arthur Adelman**, M.D., Kansas City.

Certificates of Fellowship were awarded 251 members by the American College of Chest Physicians at a convocation held in Atlantic City on June 4, among them **A. Graham Asher**, M.D., Kansas City; **Thomas Fleming**, M.D., Moberly; **William Conwell Banton**, M.D., **John C. Murphy**, M.D., and **Arthur E. Strauss**, M.D., St. Louis.

The "Citizen of the Week" in the *Malden Merit* of July 1, was **John D. Van Cleve**, M.D., Malden. A story of his life and achievements was given.

"Cardiac Arrythmias in Physical and Emotional Stress" is the title of a talk to be presented by **Michael Bernreiter**, M.D., Kansas City, before the International Medical Congress in Verona, Italy, early in September.

Speaker at a meeting of the Greater Kansas City Foundation for Exceptional Children on June 13, was **G. Wilse Robinson, Jr.**, M.D., Kansas City.

At a recent meeting of the State Board of Medical Examiners in Jefferson City, 240 medical licenses were issued, eighteen of which were issued by reciprocity from another state.

NEW MEMBERS

Bibb, John D., M.D., 317 W. Kansas, Independence. Jackson County

Borklund, Maurice K., M.D., 308 E. 21st Ave., North Kansas City. Clay County

Bradshaw, W. D., M.D., 106 S. Third St., Clinton. Henry County

Davis, Leonard L., Jr., M.D., Jackson St., Mexico. Audrain County

Fogel, Isadore B., M.D., 100 Garden Bldg., Kansas City. Jackson County

Harr, Donald L., M.D., 2200 McCoy, Kansas City. Jackson County

Hart, Lawrence W., M.D., 1710 Independence Ave., Kansas City. Jackson County

Hewitt, John H., M.D., Elms Hotel, Excelsior Springs. Clay County

Johns, G. A., M.D., Marshall. Saline County

Kiser, David M., M.D., 4711 Central, Kansas City. Jackson County

Lytton, George J., M.D., 2200 McCoy, Kansas City. Jackson County

Price, Harry J., M.D., 312 E. Main St., Hayti. Pemiscot County.

Sportsman, Weldon L., M.D., Gashland Clinic, Gashland. Clay County.

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Councilor District News

FIFTH COUNCILOR DISTRICT

J. LOREN WASHBURN, VERSAILLES, COUNCILOR

Audrain County Medical Society

The Audrain County Medical Society held its regular July meeting on July 18, 1955, in the cafeteria of the Audrain County Hospital, Mexico, beginning at 7:30 p.m.

The meeting was called to order by the president, Dr. Ben N. Jolly. The minutes of the previous meeting were read and approved.

The application for membership of Dr. Leonard L. Davis, Jr., recently locating in Mexico, was presented, and he was unanimously voted into the Society.

The polio program for giving the second shot on July 28, 1955, at the National Guard Armory in Mexico at 8:00 a.m. was announced by Dr. Dwyer, the county chairman of the polio vaccine program. All doctors agreed to be present to help.

House of Representatives Resolution 7225 in the Federal Congress, concerning cash disability payment under society security, was discussed. A telegram from the Society, opposing this resolution was sent to the honorable Clarence Cannon, House of Representatives, Washington, D. C., who represents the Ninth Congressional District of Missouri.

There were twelve in attendance at this meeting.

Thomas L. Dwyer, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Mid-Missouri County Medical Society

On Thursday evening, June 30, a special picnic meeting of the Mid-Missouri County Medical Society and the families of the members was held at Owens Point on the Lake of the Ozarks at the private cabins of Drs. Carrington and Hurst of Lebanon.

The ladies brought well filled picnic baskets, and the big meat dish was supplied by Drs. Carrington and Hurst.

Boating, swimming, fishing and lots of rest were on the agenda.

The Society has a number of new members, and this special meeting presented an opportunity for all to get better acquainted.

Meeting of July 28

On Thursday night, July 28, the Mid-Missouri County Medical Society and its ladies held a dinner meeting in Rolla with plenty of air conditioning.

The program for the evening was furnished by the Missouri Academy of General Practice in cooperation with St. Louis University Medical School as follows: Panel discussion, "Recent Advances in the Treatment of Rheumatic Fever," James P. King, M.D., St. Louis, Moderator; Edward Reh, M.D., St. Louis; Paul Scheele, M.D., St. Louis. This was a most interesting and informative program with sufficient informational discussion to bring out many practical aspects in the management of rheumatic fever.

M. K. Underwood, M.D., *Secretary*

South Central Counties Medical Society

The South Central Counties Medical Society and its ladies held a dinner meeting on Thursday evening, July 21, at Dr. Cooper's camp on the river below Mammoth Springs, Arkansas.

The program for this meeting centered around "sports" and "relaxation," and all seemed to feel the program suitable for this time of year.

A. C. Ames, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Mineral Area County Medical Society

The last meeting of the Mineral Area County Medical Society, before summer vacation, was held Thursday night, June 30, at the State Hospital, Farmington.

Dr. Sinner had an attentive audience.

Fourteen physicians attended the meeting.

The program for the evening, under the sponsorship of the Missouri Academy of General Practice, was presented by Dr. B. L. Sinner, Department of Surgery, St. Louis University Medical School, who discussed "Hernias and Why They Recur."

He gave a most practical down-to-earth discussion on this important subject.

Fourteen physicians were in attendance.

C. E. Carleton, Jr., M.D., *Secretary*

CORRESPONDENCE

Communication From State Board of Medical Examiners

To the Editor:

It has come to the attention of this Board that there are some unlicensed doctors practicing medicine and surgery under the supervision of licensed doctors in the State of Missouri. There has been a recent ruling of the Missouri Attorney General regarding such practices. The following is the conclusion of the Attorney General's opinion:

"It is the opinion of this office, that subject to the exceptions contained in Section 334,150, RSMo 1949, a physician who is not licensed in the State of Missouri may not engage in activities constituting the practice of medicine within the State of Missouri, regardless of who his employer may be or under whose supervision he may do so."

It is understood that the intern and resident training program is excepted.

Missouri State Board of Medical Examiners.

KANSAS CITY SOUTHWEST CLINICAL SOCIETY

Program Highlights
Annual Fall Clinical Conference

Municipal Auditorium—Kansas City, Mo.
October 3, 4, 5, 6, 1955

The Edward Holman Skinner Memorial Lecture will be presented by Eugene P. Pendergrass, M.D., Professor, Radiology, University of Pennsylvania.

Fifteen Distinguished Guests will participate in:

Lectures on Timely Topics.

Panels: Nonmalignant Lung Diseases; Postcholecystectomy Syndrome; Bleeding Gastrointestinal Lesions; Urinary Tract Infections—Chronic and Recurrent; Hormones and Newer Drugs—Their Use and Abuse.

Conferences: Clinicopathologic; Management of Diabetes.

Color Television: Operative Clinics; Clinical Demonstrations; How You Do It.

See the program issue of the *Kansas City Medical Journal* or write for particulars—3036 Gillham Road, Kansas City 8, Mo.

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News From the Medical Schools

WASHINGTON UNIVERSITY

The appointment of Dr. Robert J. Glaser as associate dean of Washington University School of Medicine was announced recently by Dean Carl V. Moore. Dr. Glaser was assistant dean in 1947 and from February 1953 until July 1, 1955, when his new appointment became effective. He also is an assistant professor in the department of medicine. A graduate of Harvard College in 1940 and of Harvard Medical School with high honors in 1943, Dr. Glaser received intern and resident training at Barnes Hospital, St. Louis, and Peter Bent Brigham Hospital in Boston. He is chief of the rheumatic fever clinic at Washington University and a consultant in rheumatic disease for the Division of Services for Crippled Children at the University of Illinois. He also was a consultant in rheumatic fever for the State of Missouri Crippled Children's Service for six years.

The appointment of Dr. Arthur L. Haskins, Jr., as professor and chairman of the department of obstetrics at the University of Maryland School of Medicine, Baltimore, was announced at a recent Board of Regents meeting at the university. The appointment was effective July 1. Dr. Haskins, who was an assistant professor of obstetrics and gynecology at Washington University School of Medicine, came to St. Louis in 1947 as an intern at St. Louis Maternity and Barnes hospitals. A medical graduate of the University of Rochester in 1943, he served in the Navy four years.

Dr. Albert I. Mendeloff, associate professor of medicine and of preventive medicine, has been named clinical chief of staff in medicine at the Sinai Hospital in Baltimore. He will be the first full time physician-in-chief at Sinai Hospital and will assume his new position September 15. In addition, Dr. Mendeloff has been appointed associate professor in medicine at Johns Hopkins University Medical School. A graduate of the Harvard Medical School, Dr. Mendeloff has been associated with Washington University School of Medicine since 1949.

A research grant of $3,975 has been awarded by the St. Louis Heart Association to Dr. Sol Sherry, director of the division of medical services at the Jewish Hospital Medical Center. Dr. Sherry also is associate professor of medicine at Washington University School of Medicine. The grant is for a research project on heart muscles being carried out by Dr. Sherry and Dr. Murray Chinsky.

A fellowship of $3,000 has been awarded Washington University School of Medicine by Swift and Company for the year July 1, 1955, to June 30, 1956. This is the third Swift and Company Nutrition Fellowship awarded to the department of surgery. These funds are used for the support of research on the study of the capacity of an individual to cope with infections, according to Dr. Carl A. Moyer, professor and head of the department of surgery.

Dr. Edward W. Dempsey, professor of anatomy and head of the department, attended, by invitation, the Ciba conference held July 5 to 8 in London and par-

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ticipated in a symposium on "Ageing of Transient Tissues."

Two Washington University School of Medicine faculty members presented papers at the Sixth International Congress of Anatomists July 25 to 30 in Paris. They were Dr. Mildred Trotter, professor of gross anatomy, and Dr. Walter P. Covell, associate professor of anatomy and of otolaryngology. The title of Dr. Trotter's paper was "Ash Weight of Human Skeletons in Per Cent of Their Dry, Fat-Free Weight," prepared by her and Dr. Roy R. Peterson, instructor of anatomy. Dr. Trotter currently is the first woman president of the American Association of Physical Anthropologists.

Dr. Paul O. Hagemann, assistant professor of clinical medicine, has been elected president of the Washington University School of Medicine Alumni Association for 1955-56. Dr. Louis T. Byars, associate professor of clinical surgery, was chosen president-elect. Other officers are Dr. Lee B. Harrison, instructor in clinical medicine, vice president; Dr. Ernest T. Rouse, assistant professor of clinical medicine, secretary-treasurer; and Dr. Wendell G. Scott, associate professor of clinical radiology, representative to the Washington University Alumni Federation Board.

Summer research fellowships have been awarded to forty students at Washington University School of Medicine, Dean Carl V. Moore announced recently. Funds for these fellowships come from departments of the Medical School and the Jackson Johnson scholarship fund, supplemented by grants from the National Foundation for Infantile Paralysis, the National Science Foundation, the U. S. Public Health Service, Lederle Laboratories, the National Council to Combat Blindness and the Tobacco Industry Research Committee. Funds for two scholarships were given by Mrs. Joseph H. Grand, of St. Louis, in honor of the birthday of her husband. All but one of the fellowship winners are engaged in research in one of the departments at Washington University School of Medicine under the direction of either the head of the department or a staff member of that department. Most of the students are working in one of the following departments: Anatomy, medicine, microbiology or pharmacology. Other departments represented in the projects are physiology, biological chemistry, neuropsychiatry, ophthalmology, pathology and surgery.

A recent visitor at the Medical School was Dr. Rajendra G. Desai, of Bombay, India. Dr. Desai, who visited with Dean Carl V. Moore and Dr. Edmund V. Cowdry of the medical staff, has spent three years in the United States and received a Ph.D. degree in physiology from Boston University in June. He also studied with Dr. William Dameshek, a hematologist of Boston. After a tour of western United States, Dr. Desai will go to Europe for a lecture tour. While at the medical school Dr. Desai showed a colored film on "Hematological Experiments in the Cheek Pouch of Hamsters."

SAINT LOUIS UNIVERSITY

Honors

Saint Louis University conferred an honorary degree upon Dr. Edward A. Doisy, distinguished service professor of biochemistry and director of the department at commencement exercises held at Kiel Auditorium June 7. The Very Rev. Paul C. Reinert, S.J., president, presented Dr. Doisy with a Doctor of Laws degree, "to signalize the University's evaluation of Dr. Doisy not only as a scientist, but as a benefactor of humanity . . . but a degree traditionally associated with the guardian of justice and social welfare. The citation for Dr. Doisy, read by Dean James W. Colbert, Jr., listed his accomplishments in his field and his great contributions to science through his work as a teacher and a consultant to the government and to national scientific groups. Earlier in the year, the University honored Dr. Doisy by naming its Department of Biochemistry, the Edward A. Doisy Department of Biochemistry.

Dr. Maurice Roche, senior instructor in orthopedic surgery, has been elected to the New York Academy of Sciences.

Dr. John J. Hammond, assistant professor of clinical medicine, and Dr. J. F. Gerard Mudd, instructor in internal medicine, were awarded plaques of meritorious achievement by the St. Louis City Hospital Alumni at its 67th annual alumni meeting held in May at Hotel Chase.

Travel

Two members of the anatomy department attended the Sixth International Congress of Anatomists held in Paris the last week in July.

Dr. Kermit Christensen, professor of anatomy, delivered a paper titled "Manometric and Histochemical Studies of Cholinesterase in the Blood Vessels of the Cat" before the congress. Dr. John F. Schmedtje, assistant professor of anatomy, was on hand to attend the scientific sessions. Both took European tours of anatomic laboratories and both visited old family homes in Denmark. Dr. Christensen toured Spain, Italy, France, Switzerland, Austria, Germany, Great Britain and Belgium, while Dr. Schmedtje made stops in France, England, Germany and Italy.

Dr. James F. Dowd, senior instructor in surgery, returned to St. Louis June 17 after a five week trip to Europe. While abroad he presented a paper on "Management of Facial Injuries as a Result of Automobile Accidents" at the meeting of the International College of Surgeons at Geneva, Switzerland.

Dr. Robert Dean Woolsey, instructor in surgery, addressed the section on Nervous and Mental Diseases at the American Medical Association's 104th Annual Meeting held in Atlantic City June 6 to 10. Dr. Woolsey delivered a paper titled "The Decompression Operation for Trigeminal Neuralgia."

Dr. Louis H. Kohler, associate professor of clinical neurology and psychiatry and Medical Director, St. Louis State Hospital participated in the presentation of a scientific exhibit showing the effects of treatment by various drugs and drug combinations in a group of senile patients at the session of the American Medical Association.

Election

The University's medical alumni reunion held June 8 at the A.M.A. convention in Atlantic City set the scene for electing new officers of the Alumni Association. Dr. Alphonse McMahon, associate professor of internal medicine and chief-of-staff at St. John's Hospital, is the new president; Dr. Pierce Mullally, a 1943 graduate of Cleveland and Dr. John V. Sheedy, a 1933 graduate of Syracuse, New York, are the new vice presidents; and Dr. Clement B. Grebel, assistant in internal medicine, was reelected secretary-treasurer.

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WANTED: Replacement for draft eligible physician in a small town in Northeastern Missouri. Good equipment, small investment. No opposition. Write Box 197, Missouri State Medical Association, 623 Missouri Theatre Bldg., St. Louis 3.

WANTED: A good young physician to take over my office. I plan on retiring about June or July 1. Good community and good farming territory. Write, R. C. Schooley, M.D., Odessa, Mo.

WANTED—General Practitioner-Surgeon: for rural community; population 2200; excellent opportunity for energetic man; moderate amount of OB; hospital facilities within 20 miles; only surgeon; must be replaced in order to enter service; excellent equipment; salary, percentage or partnership agreement; send full particulars; must have Missouri license or reciprocation. Box 200, c/o Missouri State Medical Ass'n., 623 Mo. Theatre Bldg., St. Louis 3, Mo.

WANTED—Young M.D. to take over extensive practice of doctor entering service. Excellent office set-up. Only M.D. in prosperous town of 2,400, North Central Missouri. Attractive proposition guaranteed. Box 204, Missouri State Medical Association, 623 Missouri Theatre Bldg., St. Louis.

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The Journal of the Missouri State Medical Association

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Surgical Technic, Surgical Anatomy & Clinical Surgery, Four Weeks, October 10
Surgical Anatomy & Clinical Surgery, Two Weeks, October 24
Surgery of Colon & Rectum, One Week, October 17
General Surgery, Two Weeks, October 3; One Week, October 17
Gallbladder Surgery, Ten Hours, October 24
Thoracic Surgery, One Week, October 3
Esophageal Surgery, One Week, October 10
Basic Principles in General Surgery, Two Weeks, September 26
Fractures & Traumatic Surgery, Two Weeks, October 17
GYNECOLOGY—Office & Operative Gynecology, Two Weeks, November 28
Vaginal Approach to Pelvic Surgery, One Week, November 7
OBSTETRICS—General & Surgical Obstetrics, Two Weeks, November 7
MEDICINE—Two-Week Course, September 26
Electrocardiography, One Week Advanced Course, September 19
Electrocardiography & Heart Disease, Two-Week Basic Course, October 10
Gastroscopy, Forty-Hour Basic Course, November 7
Dermatology, Two Weeks, October 17
RADIOLOGY—Clinical & Didactic Course, Two Weeks, October 3
Clinical Uses of Radioisotopes, Two Weeks, October 10
PEDIATRICS—Clinical Course, Two Weeks, by Appointment
Pediatric Cardiology, One Week, October 10 and 17
UROLOGY—Two-Week Course, October 10

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Curiosa et Trivia

William B. McCunniff, M.D.

Statistics indicate that between 6,000 and 8,000 Americans will have cardiac arrest under anesthesia in the next year.

Small wonder that colds "get around"—the droplets of a cough may reach speeds up to 240 m.p.h.

L. O. D. YES? Tamara Rees (*nee* Robert Rees) returned to the U. S. after a Christine Jorgensen-type operation, promptly checked in a V.A. hospital for "observation" and was admitted as a service connected case.

If you're not convinced about the relation between speed and traffic accidents, philosophize about the number of injuries received when two pedestrians collide—some few humans can run for short distances as fast as 23 miles per hour!

They don't spend all their time at the chart desk, Doctor; a Meadville, Pennsylvania, student nurse, Margaret O'Laughlin, walked a measured 4,690¼ miles during her three year period of training.

After several years as "side man" with name bands, including Gene Krupa's, Des Moines physician, Stewart O. Olson, put his saxophone aside, received his M.D., and settled down to a "less shaky future."

The average hourly wage of physicians in the U. S. was $3.13 in 1949, $3.26 in 1950, and $3.54 in 1951.

There's still nothing new under the sun—even in the era of nuclear fission. Shakespeare (Romeo and Juliet) wrote: ". . . she comes . . . drawn with a team of little atomies."

In case you're interested, a liter of California Dry Sauterne wine contains 40 mg. sodium and 900 mg. potassium. And didn't grandma advise wine as a pickup after a debilitating illness? And does it work better since we measure milliequivalents instead of wine glasses?

Abdominal packs at 50 degrees Centigrade produce severe serosal damage; at 45 degrees, moderate adhesions, and at 35-40 degrees minimal adhesions.

Distinguished New York surgeon, Dr. Stephen Smith, served sixty years on the staff of Bellevue Hospital, and died at the age of 99½. Remarkable enough, but more so since he had been put on a bread and milk diet as an infant, and had adhered rigidly to it until he was 70—after that he took a little wine with his meals.

Those induction station physicals again. . . . Dr. James Barry served fifty-two years in the British Army, became a General in the Army Medical Corps. Not until the General's death in 1865 was it discovered that Dr. Barry was a woman.

On the death of the great Dutch physician, Dr. Herman Boerhaver, a sealed book, "The Onliest and Deepest Secrets of the Medical Art" was found. Sold at auction for $10,000, the book was opened, found to have 99 blank pages—but the title page bore this insert in the doctor's writing: "Keep your head cool, your feet warm, and you'll make the best doctor poor."

Capsule Clinics

I. A. Wien, M.D.

- Patients with pernicious anemia have gastric cancer three times as often as patients without anemia. Cancer Bull., March 1955.
- In pooled liquid plasma allowed to stand at room temperature for six months or longer death of virus infections occurs and thus eliminates hemologous serum jaundice. Allen, J. G.: Bull. Am. Coll. Surg. 40 (May-June) 1955.
- The indications for surgery in cases of peptic ulcer of the stomach still remain perforation, obstruction, hemorrhage, and intractability. Wilkinson, S. A.: Surg. Clin. N. America 35 (June) 1955.

Entered as second-class matter, February 18, 1925, at the post office at Fulton, Missouri, under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917. Publication Office: 1201-5 Bluff Street, Fulton, Missouri. Editorial Office: 634 N. Grand Ave., St. Louis 3, Mo. Subscription Price: $3.00 Per Year. Printed by The Ovid Bell Press, Inc., Fulton, Missouri.

Missouri Academy of General Practice

Kenneth Glover, M.D.

Postgraduate Education

As the time for our annual session approaches it might be well for us to consider again what is meant by our postgraduate study courses. According to the Commission on Education in its annual report given at Los Angeles last March, the formal study course credit shall include:

A. Any postgraduate course given by an accredited medical school or recognized postmedical school.

B. Any course sponsored by the AAGP or by any of its constituent chapters or by a medical administrator approved by the regional advisor of the Commission on Education and processed and disseminated by the AAGP or its constituent chapter.

C. The annual scientific assembly of the AAGP.

D. The annual scientific assembly of each state chapter providing it be approved in advance by the regional advisor for the Commission on Education.

E. The publication of scientific papers which shall receive five hours credit if published in a State Journal, and 15 hours credit if published in a National Journal.

The division of informal credits is as follows:

A. Scientific meetings of the AMA.

B. Local and state medical societies scientific meetings.

C. Hospital staff scientific conferences and clinical pathologic conferences.

D. Postgraduate seminars and assemblies not otherwise covered in paragraph one above.

The argument as to whether or not this is a fair division still is presented at each of the meetings of the congress of delegates. However, it is necessary that some line of division be made as yet, and since only 50 hours of formal training are required and 100 hours of informal training, it still remains easier to get the 100 hours of informal training for most doctors in the outlying areas than it is to get those 50 hours of formal training. However, soon again each rural doctor will be presented with the advantage of going to a nearby town where regular courses of instruction will be given which will fall into the classifications of formal training above outlined. If these doctors will take their afternoon off or an evening off to attend these meetings it will be possible for them to reach 50 hours easily.

Hospital residency for general practitioners is a subject that is taking a good deal of time of the Commission of Education at this time. Many hospitals have started such a program. Others are wanting to start this program just as soon as some outline can be given them as to what is desired by the American Academy of General Practice. There have been three plans suggested but not definitely approved as yet. They are as follows (following his rotating internship).

Plan 1 for one year, the resident general practitioner may choose one of the following: (A) One year of internal medicine, (B) One year of pediatrics, (C) Six months of medicine plus six months of pediatrics, (D) Six months of medicine plus six months of obstetrics and gynecology.

Plan 2, a combination of any two of these two years: (A) One year internal medicine plus one year of obstetrics and gynecology, (B) One year pediatrics plus one year of obstetrics and gynecology, (C) One year of medicine plus one year of surgery, (D) One year of medicine plus six months of surgery plus six months of obstetrics and gynecology, (E) One year of medicine plus six months of pediatrics plus six months of obstetrics and gynecology.

Plan 3 which involves three years of residency training: (A) One year of internal medicine plus six months pediatrics plus six months obstetrics plus six months of surgery, (B) One year of medicine plus six months of obstetrics and gynecology and eighteen months of surgery.

No decision has been made as yet on these plans, but since it is difficult to decide in advance where the young general practitioner will be working, what type of work that he will be expected to do more than any other, and whether he will choose city or rural practice, it is quite difficult to find the flexibility in this program of residency training which will meet his particular needs. However, in our organization the training program is not completed at the time that the residency training is done nor is it completed any two or three years following this time, but rather it is a progressive training, one that the general practitioner must continue throughout his years of practice.

Attend the
State MAGP
Meeting

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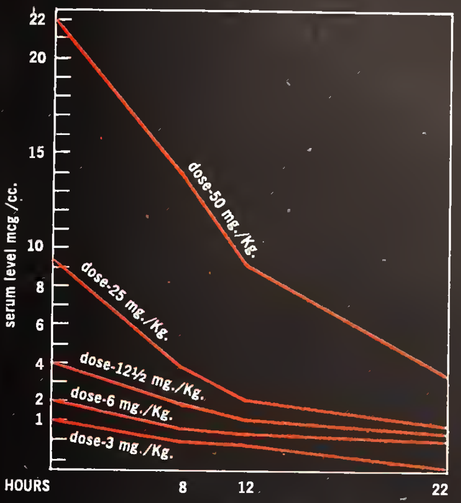

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O'Regan, C., and Schwarzer, S.: J. Pediat. 44:172 (Feb.) 1954.

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Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

The Iowa State Medical Association has amended its constitution so that the president is elected one year in advance of the date he assumes the duties of his office, that is, he is president-elect. Kentucky has followed this method for several years. It has been suggested that such an arrangement would be a forward movement for our Association to adopt.

The voting population of Joplin who rent telephones did not have a chance to forget the special election held on September 14 to vote on a bond issue for building a tuberculosis hospital, because a committee from the Civic League composed chiefly of women called each one and reminded him of his duty to vote for the proposition. The bond was authorized by a large majority.

Webster County Medical Society reports holding one of the best meetings in its history at the September session. Nearly every member was present and several visiting physicians added to the interest of the occasion. The secretary announces that he will collect dues at the December meeting and urges all members to pay promptly so Webster County may be first on the roll of honor for 1916, instead of second as it was this year.

Governor Major appointed the following delegates to the Mississippi Valley Conference on Tuberculosis, which met at Indianapolis, September 29, 30 and October 1: Dr. St. Elmo Sander, Kansas City; Dr. Samuel Lipsitz, Dr. John Young Brown and Mr. A. W. Jones, Jr., St. Louis; Dr. Walter McNabb Miller, Columbia; Dr. Edwin James, Springfield; Dr. William M. Bayliss, Clarence; Dr. J. L. Eaton, Bismarck; Dr. J. W. Dreyfuss, Louisiana; Dr. W. A. Clark, Jefferson City.

Frank E. Chapman, superintendent of the St. Louis City Hospital, has resigned to accept the superintendency of the Cleveland Jewish Hospital, which is about completed and was erected at a cost of $500,000. The resignation takes effect October 20. Mr. Chapman has been superintendent of the St. Louis City Hospital for two years and is said to be the youngest hospital superintendent in the country, being 33 years old.

Mr. Emil N. Tolkacz, the director of public welfare, presented his report to the mayor recently Mr. Tolkacz declared that the city's treatment of its insane wards is "barbarous and inhuman" because of the lack of modern buildings and methods. Mayor Kiel is quoted as saying that under the present system at the City Sanitarium if a man were nearly normal and had a chance of recovery a year's residence at the institution would make him insane.

TWENTY FIVE YEARS AGO

We learn from *Science* that Dr. Elias P. Lyon, Minneapolis, dean of the University of Minnesota Medical School, formerly dean of the St. Louis University School of Medicine, was recently awarded the degree of doctor of science by the University of Southern California.

At the recent annual meeting of the National Board of Medical Examiners, the following officers were elected: Dr. Waller S. Leathers, Nashville, president; Everett S. Elwood, executive secretary; and Dr. J. S. Rodman, Philadelphia, medical secretary. Forty states, including Missouri, and Hawaii, Puerto Rico and the Canal Zone, recognize the National Board's certificate and partial recognition is given by England, Scotland, Ireland and Spain.

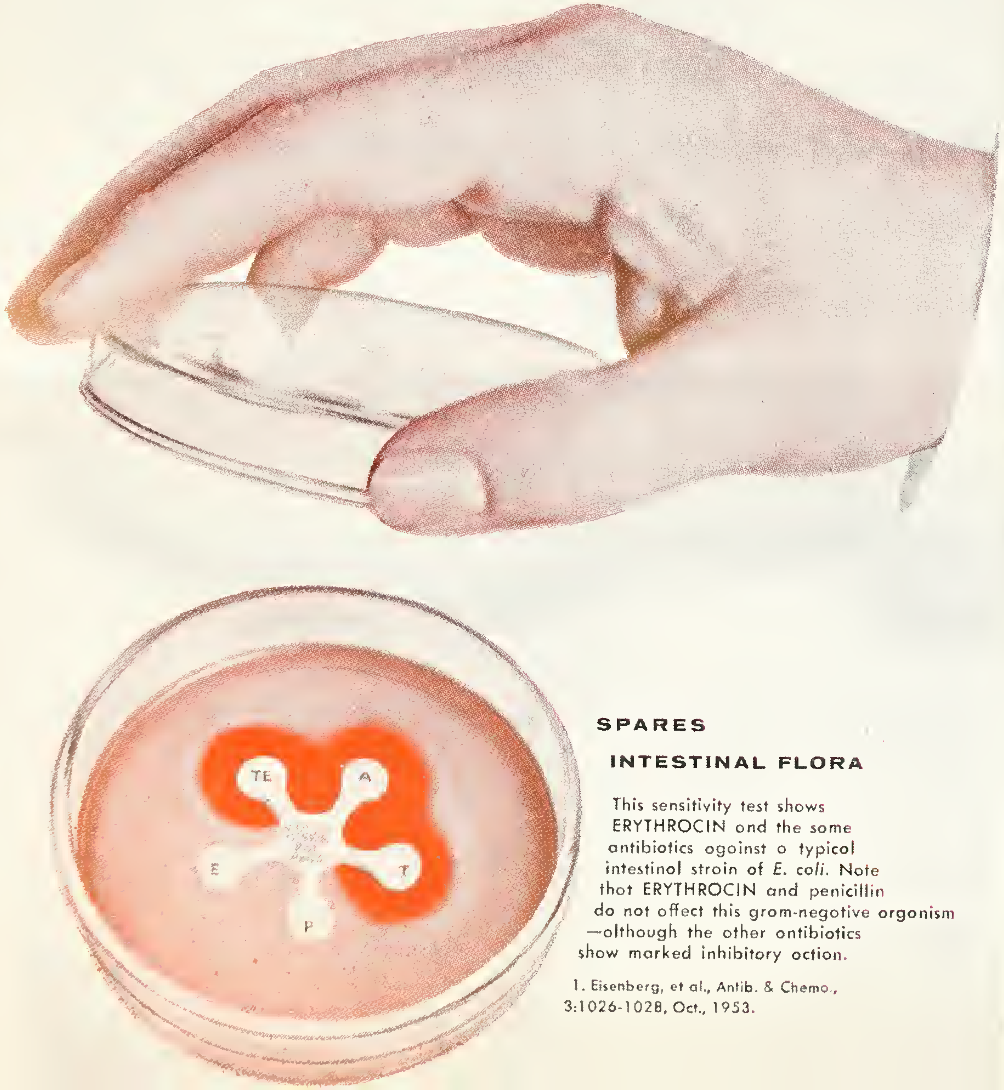
Dr. B. F. Carr, Polo, was honored July 31 at a celebration of the completion of fifty years in the practice of medicine. All but five years of this time Dr. Carr practiced in Polo, this five year period being spent in the Indian Service. Dr. Carr graduated from the medical department of the University of Missouri in 1880.

On August 1, the United States Department of Agriculture definitely designated the State of Michigan as a "modified accredited" area, signifying that all cattle herds in Michigan are practically free from tuberculosis. This is the third state to attain such distinction, Maine having been qualified in March 1929, and North Carolina in October 1928. Michigan's accrediting followed the dismissal of a case filed by an Ionia County cattle owner in which the circuit judge sustained the right of public authorities to test, condemn, appraise and slaughter privately owned cattle in the campaign to eradicate bovine tuberculosis.

There were 2,000 cases of smallpox reported in Missouri during the first seven months of 1930, according to a report from the State Health Department. During the same period last year there were 1,087 cases.

The *Indian Medical Record,* edited by Santosh Yumar Mukherji, M. B., Calcutta, India, celebrated its Golden Jubilee this year by two special issues, one in February and one in September. The *Record* was established by the late Dr. James Robert Wallace in 1880, and later became the organ of the Indian Medical Association when that

(Continued on page 768)



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1. Eisenberg, et al., Antib. & Chemo., 3:1026-1028, Oct., 1953.

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Woman's Auxiliary

Mrs. Frank B. Leitz, *President*

Immediately following the national convention, the newly installed president of the Woman's Auxiliary to the American Medical Association decides on a theme for the year of her administration. This theme is submitted to state auxiliary leaders with the suggestion that "wherever feasible, auxiliary programs will be slanted toward this objective."

This year our national president, Mrs. Mason G. Lawson, has selected as a theme, "Active Leadership in Community Health."

From our point of view, it is feasible that the program of the Woman's Auxiliary to the Missouri State Medical Association be slanted toward this objective.

Missouri is a state with a well balanced economy. We have our fair share of large cities with the attendant industry and big business; we have our fair share of agricultural communities and small towns. Large city auxiliaries are concerned about the small percentage of members who attend meetings. Agricultural community auxiliaries have the problem of few members eligible to membership and great distances to be traveled in order to attend meetings.

This year's theme gives us an objective which may be carried out to the fullest extent in all parts of our state. Everywhere there are community health problems. If each auxiliary member, whether she live in a sparsely or thickly settled part of Missouri, takes "Active Leadership in Community Health" Missouri will be a better state in which to live.

At all levels, national, state and county, our auxiliaries have medical advisory councils. It is our suggestion, of course, that auxiliaries and individual members consult with advisory councils or doctor husbands for advice on where their energies may best be expended in carrying out "Active Leadership in Community Health."

Missouri Medicine in Review

(Continued from page 764)

organization was established. The *Record* has taken an active part in campaigns against tuberculosis, kala-azar, leprosy, venereal disease and epidemic dropsy, and has been instrumental in promoting the study of disease of internal secretion and indigenous drugs and encouraged higher standards of medical education in India.

TEN YEARS AGO

According to news dispatches, Col. W. J. Shaw, Fayette, assisted in caring for Tojo after his attempted suicide recently in Tokyo.

Capt. Edward N. Zinschlag, St. Louis, has been decorated with the Silver Star for gallantry in action at the siege of Bastogne. He volunteered to fly to the American strong point by glider and performed a number of operations in the forty-eight hours before tanks arrived for rescue.

The Missouri State Medical Association supports the House Bill No. 291, introduced by Mr. Whinrey, of Lawrence County, which has passed the House and is now being considered by the Senate Committee on Education. This bill provides for scholarships for medical students from each of the state's thirty-four senatorial districts. There is another provision in the bill denoting that the student, on graduation, must agree to practice within his district for a period of five years.

St. Louis University School of Medicine has announced the appointment of Dr. Joseph A. Hardy as head of the department of gynecology and obstetrics; Dr. B. J. McMahon as head of the department of otolaryngology, and Dr. G. V. Stryker as head of the department of dermatology.

Today there are more than 2,000,000 Americans paying their physicians' and surgeons' bills through medical and surgical care plans. One out of every seven Americans is paying his hospital bill through Blue Cross plans, or 17,500,000 persons. There are now approximately twenty-one medical and surgical care plans in operation and only six states, containing but 5 per cent of the population of the United States, are without Blue Cross plans.

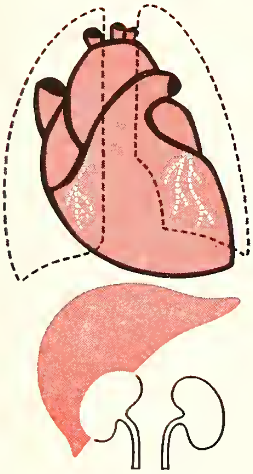
BOOK REVIEW

Management of Addictions, Edited by Edward Podolsky, M.D., Department of Psychiatry, Kings County Hospital, Brooklyn, New York; Editor of "Music Therapy" and "War Medicine." Philosophical Library, New York. 1955. Price $7.50.

This work is rather a patchwork of articles by various authors dealing with phases of the addictions—alcoholic, narcotic, and the like. Some of the articles are clinical and others are of the research order. The subject is by no means completely covered but some of the articles are interesting. L. B. A.

does your
diuretic
cause
acidosis?

**know
your
diuretic**



diuresis without depletion of alkaline reserve—avoiding dangers of acid-base imbalance—is characteristic of the organomercurials. In contrast, the diuretic activity of carbonic anhydrase inhibitors, acidifying salts, and the resins depends on production of acidosis.

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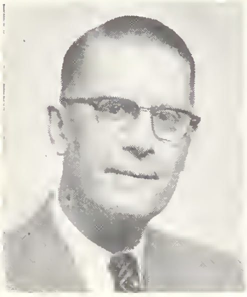
Missouri State Board of Medical Examiners

Duff S. Allen, M.D., *President*

The Foreign Educated Physician



The problem of determining which foreign educated physician to admit to State Board examinations is most difficult. The magnitude of the problem is at once apparent when one finds that today there are about 26,000 foreign educated physicians in the United States. Collected experiences of the State Licensing Board indicate that about 50 per cent of these have been licensed. This leaves a pool of at least 13,000 foreign educated physicians who are unlicensed. About 90 per cent of these unlicensed physicians plan to remain in the United States. The total number of physicians who graduated from the eighty-one medical schools in the United States last year was 6,861 and in the year 1953 there were 6,688. Thus there are in the United States today almost as many unlicensed foreign educated physicians as the product of all of approved United States medical schools for the last two years.

How do these foreign educated doctors compare with the graduates of our own medical schools? Some few are about equal to our graduates, but most of them have not had training which is at all comparable to that of our American doctors. Dr. Elmer W. Schnoor, who is a member of the Executive Committee of the Federation of State Medical Boards of the United States, points out that the recent devastating wars have been disastrous to the former great European medical institutions, with resulting deterioration in educational standards. The decline in the quality of medical education in most of the countries in Europe and Asia has been progressive for the last thirty years.

Efforts are being made both on the national and the state levels to cope with this situation, especially in the matter of admitting these foreign educated doctors to the State Board examinations. Michigan has set up two oral screening boards composed of twelve members appointed by the respective deans of the University of Michigan Medical Schools and of Wayne University College of Medicine. The school departments represented on these screening boards are anatomy, bacteriology, biochemistry, physiology, pharmacology, internal medicine, surgery, pediatrics and obstetrics. It is necessary for the foreign graduates to pass a thorough screening test given by one of these Boards before he is allowed to take the Michigan State Board examinations. He must also pass through one of these screening board tests before he is accepted as an intern in the hospitals in the State of Michigan. Forty per cent fail.

New York State has required one year supplemental medical education by these immigrant physicians before they are allowed to take the State Board examinations.. Such courses have been given at the New York University College of Medicine for the last four years. Similar courses have been given at the University of Michigan Medical School for the last eighteen years, but they have recently been discontinued there.

Dean Furstenberg reporting at the 51st Annual Congress on Medical Education and Licensure in February 1955 stated as follows: "Faculty time was devoted to them in English courses, special extracurricular tutorial programs were organized for some individuals and repeated examinations were offered to others by charitable members of the medical faculty in an effort to find some honest reason for certifying that they were qualified for admission to the examinations of the Michigan State Board of Registration of Medicine. Finally, the faculty expressed resentment of the time devoted to poor students at the expense of good scholars and voted to abolish this program of aid to the graduate of foreign medical schools."

The experience at the New York University College of Medicine seems to have been better than that at the University of Michigan. Dr. Robert Boggs reported from that institution as follows: "In summary, we have found our task arduous but extremely rewarding. We earnestly urge the other medical schools of the country to establish similar programs, and to allow the physicians who immigrate to our country and who can qualify the opportunity to enter practice."

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 52 October, 1955 Number 10

Head Injury

Its Significance in Brain Tumors

FRANK A. PALAZZO, M.D., *St. Louis*

The relative importance of trauma in the course of brain tumor disease often assumes considerable magnitude medicolegally, particularly in view of the increasing consciousness of insurance benefits by the public and as the accidents and deaths from use of the automobile continue to increase.

A fairly abundant literature on the subject attests to the lack of agreement, some contending that trauma can cause tumor production,* while others flatly reject this.**

The important aspect of the subject medicolegally lies in the significance of trauma as the precipitator of symptoms in a latent or quiescent tumor, rather than the cause of tumor formation.

Brief case reports on six patients are presented which appear to illustrate and support strongly the precipitator or aggravatory role of trauma in cerebral tumors. In the first four cases the injury initiated immediately the chain of symptoms and signs which led to the discovery of a cerebral tumor. In the last two cases, trauma produced an immediate increase in the severity of brain tumor symptoms already manifest before injury.

CASE REPORTS

Case 1. C. T., male, aged 18 years, had intermittent left cervico-occipital headache and vomiting which began immediately after an automobile accident in October, 1951, in which he was unconscious for a few moments but not hospitalized. Diplopia occurred occasionally and loss of vision in the lower fields of vision developed shortly before hospitalization on April 4, 1952. The positive findings on neurologic examination were 5 diopters papilledema in the left eye and 3 diopters on the right; severe peripheral field defects bilaterally, greater in the lower halves; a stiff neck, and an inconstant minimal dilatation of the left pupil. Ventriculography was performed on April 7, 1952, for a probable left subdural hematoma or tumor, and revealed the presence of a third ventricle tumor which was removed and proved to be an ependymoma. A bilateral Torkildsen procedure also was carried out, with complete relief of symptoms.

Case 2. R. S., male, aged 3 years, had daily severe headache and vomiting beginning immediately after he fell and struck the left temporal area against a lamp base at home seventeen days before admission. He did not lose consciousness. Somnolence appeared four days before entry.

Neurologic examination on August 2, 1953, revealed an irritable, somnolent child who roused when spoken to but with some difficulty. Marked stiffness of the neck was present but there were no other positive findings. The patient was observed with the intent of performing trephine exploration for a probable subdural hematoma if focalizing signs or deterioration of his condition occurred. That same evening the patient took a rapid turn for the worse, becoming deeply comatose with signs of beginning medullary compression. Bilateral temporal trephine exploration was performed, but only a markedly swollen brain was encountered and 18 cc. of fluid was removed by needle aspiration from the right lateral ventricle with definite improvement of his condition. Improvement did not progress, however, and hemorrhages appeared in the optic disks by August 8, 1953. A ventriculogram on August 11 revealed a complete non-filling of the third and fourth ventricles with dilated symmetrical lateral ventricles, due to a third ventricle tumor.

In view of the grave condition of the patient, a Torkildsen procedure and deep x-ray therapy was performed with temporary benefit, but insufficient to permit exploration of the third ventricle. Signs of involvement of the basal ganglia also appeared, indicating invasive spread of the lesion, and the patient expired on October 4, 1953.

Case 3. H. L., male, aged 60 years, had cervico-occipital headaches beginning immediately after a fall from a five foot dock five weeks before admission on September 26, 1952. He struck his back and occiput and was temporarily unconscious. Several days before

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Instructor, Department of Surgery (Neurosurgery Section), St. Louis University School of Medicine.

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DISCUSSION

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Many other authors also felt that trauma could act as the precipitating agent for symptoms of brain tumor, particularly the gliomas.*

In an article written to demonstrate that trauma as the cause of gliomas was not significant, Kernohan and Parker presented two case histories which upon analysis serve as excellent examples of the aggravating or precipitating role that trauma may play. In the first patient, a 15 year old boy, brain tumor symptoms began about one week after a pole vaulting fall which occurred when the pole broke. The patient was unconscious for a few minutes. Though the astrocytoma found at operation was slow-growing histologically, symptoms did not appear till soon after the head injury. The second patient, a 34 year old locomotive fireman, was struck on the head by a 25 pound lump of coal, which fell 10 to 12 feet, stunning him only. However, symptoms of his brain tumor, which proved to be an extensive spongioblastoma, began immediately after the injury and persisted.

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Oldberg in 1933 reported a 3.72 per cent incidence of frank hemorrhage into gliomas with no studies relative to trauma and felt that the more rapidly growing the glioma, the more susceptible to hemorrhage. Such an observation, often confirmed clinically and microscopically, lends logic to the probability of producing hemorrhage into such a tumor if trauma is severe enough. Hemorrhage can be sudden and massive, or more likely gradual and moderate in degree. Oldberg found that only seven of thirty-one gliomas with frank hemorrhage studied showed clinical evidence of sudden hemorrhage into a tumor. However, gradual hemorrhage into a tumor most certainly can occur. If the element of trauma is added the same holds true.

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Contusion.—Contusion most certainly occurs in severe head injuries. If a quiescent brain tumor is present, focal edema and parenchymatous hemorrhage after injury may be sufficient to start symptoms, either by ischemia and edema locally, or by a shift of the cerebral structures with compromise of the function of the parts of the brain which are then subjected to unequal pressure. As is well known, a focal increase of edema in a brain already generally edematous sets up a vicious cycle of progressive aggravation of edema of the rest of the brain. Maximally, tentorial herniation occurs, some times associated with ischemia or thrombosis of cerebral vessels, resulting in the rapid or even sudden death seen with some brain tumors. Thrombosis as the result of extreme intracranial pressure may easily occur in the presence of severe contusion and edema.

Mechanical Distortion.—Mechanical distortion of the brain may upset a balanced state of increased pressure producing further edema, or ischemia may occur, with eventual tentorial or foramen magnum herniation. Case 1 demonstrates the effects of mechanical distortion since one can logically assume a blocking off of the aqueduct of sylvius by the ependymoma following trauma, by mechanical shift, with or without intrinsic contusion or edema in the tumor itself.

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Several factors affect the relative importance of trauma in brain tumors. Of significance are the severity of the trauma, the site of the injury and

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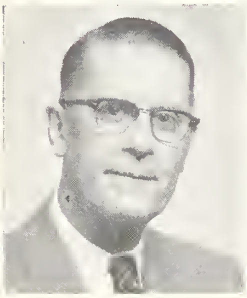
Missouri State Board of Medical Examiners

Duff S. Allen, M.D., *President*

The Foreign Educated Physician



The problem of determining which foreign educated physician to admit to State Board examinations is most difficult. The magnitude of the problem is at once apparent when one finds that today there are about 26,000 foreign educated physicians in the United States. Collected experiences of the State Licensing Board indicate that about 50 per cent of these have been licensed. This leaves a pool of at least 13,000 foreign educated physicians who are unlicensed. About 90 per cent of these unlicensed physicians plan to remain in the United States. The total number of physicians who graduated from the eighty-one medical schools in the United States last year was 6,861 and in the year 1953 there were 6,688. Thus there are in the United States today almost as many unlicensed foreign educated physicians as the product of all of approved United States medical schools for the last two years.

How do these foreign educated doctors compare with the graduates of our own medical schools? Some few are about equal to our graduates, but most of them have not had training which is at all comparable to that of our American doctors. Dr. Elmer W. Schnoor, who is a member of the Executive Committee of the Federation of State Medical Boards of the United States, points out that the recent devastating wars have been disastrous to the former great European medical institutions, with resulting deterioration in educational standards. The decline in the quality of medical education in most of the countries in Europe and Asia has been progressive for the last thirty years.

Efforts are being made both on the national and the state levels to cope with this situation, especially in the matter of admitting these foreign educated doctors to the State Board examinations. Michigan has set up two oral screening boards composed of twelve members appointed by the respective deans of the University of Michigan Medical Schools and of Wayne University College of Medicine. The school departments represented on these screening boards are anatomy, bacteriology, biochemistry, physiology, pharmacology, internal medicine, surgery, pediatrics and obstetrics. It is necessary for the foreign graduates to pass a thorough screening test given by one of these Boards before he is allowed to take the Michigan State Board examinations. He must also pass through one of these screening board tests before he is accepted as an intern in the hospitals in the State of Michigan. Forty per cent fail.

New York State has required one year supplemental medical education by these immigrant physicians before they are allowed to take the State Board examinations.. Such courses have been given at the New York University College of Medicine for the last four years. Similar courses have been given at the University of Michigan Medical School for the last eighteen years, but they have recently been discontinued there.

Dean Furstenberg reporting at the 51st Annual Congress on Medical Education and Licensure in February 1955 stated as follows: "Faculty time was devoted to them in English courses, special extracurricular tutorial programs were organized for some individuals and repeated examinations were offered to others by charitable members of the medical faculty in an effort to find some honest reason for certifying that they were qualified for admission to the examinations of the Michigan State Board of Registration of Medicine. Finally, the faculty expressed resentment of the time devoted to poor students at the expense of good scholars and voted to abolish this program of aid to the graduate of foreign medical schools."

The experience at the New York University College of Medicine seems to have been better than that at the University of Michigan. Dr. Robert Boggs reported from that institution as follows: "In summary, we have found our task arduous but extremely rewarding. We earnestly urge the other medical schools of the country to establish similar programs, and to allow the physicians who immigrate to our country and who can qualify the opportunity to enter practice."

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Head Injury

Its Significance in Brain Tumors

FRANK A. PALAZZO, M.D., *St. Louis*

The relative importance of trauma in the course of brain tumor disease often assumes considerable magnitude medicolegally, particularly in view of the increasing consciousness of insurance benefits by the public and as the accidents and deaths from use of the automobile continue to increase.

A fairly abundant literature on the subject attests to the lack of agreement, some contending that trauma can cause tumor production,* while others flatly reject this.**

The important aspect of the subject medicolegally lies in the significance of trauma as the precipitator of symptoms in a latent or quiescent tumor, rather than the cause of tumor formation.

Brief case reports on six patients are presented which appear to illustrate and support strongly the precipitator or aggravatory role of trauma in cerebral tumors. In the first four cases the injury initiated immediately the chain of symptoms and signs which led to the discovery of a cerebral tumor. In the last two cases, trauma produced an immediate increase in the severity of brain tumor symptoms already manifest before injury.

CASE REPORTS

Case 1. C. T., male, aged 18 years, had intermittent left cervico-occipital headache and vomiting which began immediately after an automobile accident in October, 1951, in which he was unconscious for a few moments but not hospitalized. Diplopia occurred occasionally and loss of vision in the lower fields of vision developed shortly before hospitalization on April 4, 1952. The positive findings on neurologic examination were 5 diopters papilledema in the left eye and 3 diopters on the right; severe peripheral field defects bilaterally, greater in the lower halves; a stiff neck, and an inconstant minimal dilatation of the left pupil. Ventriculography was performed on April 7, 1952, for a probable left subdural hematoma or tumor, and revealed the presence of a third ventricle tumor which was removed and proved to be an ependymoma. A bilateral Torkildsen procedure also was carried out, with complete relief of symptoms.

Case 2. R. S., male, aged 3 years, had daily severe headache and vomiting beginning immediately after he fell and struck the left temporal area against a lamp base at home seventeen days before admission. He did not lose consciousness. Somnolence appeared four days before entry.

Neurologic examination on August 2, 1953, revealed an irritable, somnolent child who roused when spoken to but with some difficulty. Marked stiffness of the neck was present but there were no other positive findings. The patient was observed with the intent of performing trephine exploration for a probable subdural hematoma if focalizing signs or deterioration of his condition occurred. That same evening the patient took a rapid turn for the worse, becoming deeply comatose with signs of beginning medullary compression. Bilateral temporal trephine exploration was performed, but only a markedly swollen brain was encountered and 18 cc. of fluid was removed by needle aspiration from the right lateral ventricle with definite improvement of his condition. Improvement did not progress, however, and hemorrhages appeared in the optic disks by August 8, 1953. A ventriculogram on August 11 revealed a complete non-filling of the third and fourth ventricles with dilated symmetrical lateral ventricles, due to a third ventricle tumor.

In view of the grave condition of the patient, a Torkildsen procedure and deep x-ray therapy was performed with temporary benefit, but insufficient to permit exploration of the third ventricle. Signs of involvement of the basal ganglia also appeared, indicating invasive spread of the lesion, and the patient expired on October 4, 1953.

Case 3. H. L., male, aged 60 years, had cervico-occipital headaches beginning immediately after a fall from a five foot dock five weeks before admission on September 26, 1952. He struck his back and occiput and was temporarily unconscious. Several days before

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Severity.—Trauma should obviously be sufficiently severe before one may blame it for the precipitation of brain tumor signs and symptoms.[13,31] There must always be a no-man's land in the range of head trauma from that of obviously and unquestionably trivial degree to that of mild degree which may nevertheless be sufficient to produce intracranial effects. In those instances in which trauma is insufficient to daze the patient, often producing no visible marks on the scalp, it can be assumed that any brain tumor symptoms which make themselves evident were imminent, or present but clinically unrecognized, and not due to the trauma. This is especially true if a considerable time elapses between trauma and symptoms. On the other hand, in those instances in which there is an unreliable history of unconsciousness, with few visible marks, or in those instances in which the head in rapid motion is suddenly stopped, sometimes with no serious outward marks of trauma, severe trauma may nevertheless have been sustained. A heavy thatch of hair, a thick cap, or a padded dashboard may afford protection against visible cuts or abrasions, and slight swelling or tenderness of the scalp may be overlooked on the initial examination.

Site of Trauma.—Trauma at any point on the surface of a closed rigid chamber such as the skull can often exert deleterious effects on a more distant part of the brain as well as at the point of contact. The operative findings on patients with severe head injuries bear out this observation again and again. Wechsler and others feel that the site of trauma should bear some relationship to the site of tumor development. This seems important in the eventual growth of some meningiomas, but not with tumors of the cerebrum proper. When trauma is evaluated as a precipitator of brain tumor symptoms and signs, rather than as the cause of tumor formation, obviously a severe blow to the skull could produce traumatic effects upon a brain tumor irrespective of its location in the cerebrum. This is particularly applicable to the softer brain tumors like the gliomas in which abnormal intracranial pressure is often present, as well as necrosis or softening with edema of the adjacent brain.

Time Interval.—Considering trauma as a precipitator of brain tumor symptoms and signs, the time interval between trauma and onset of the latter should be fairly short to bear a cause and effect relationship. The more immediate the onset of signs and symptoms after trauma the more probable is a true cause and effect relationship. The longer the time interval between trauma and onset of symptoms and signs the less probable becomes the cause and effect relationship. Except in those instances in which head injury is so severe that the symptoms and signs indicative of uncomplicated head injury are prolonged and merge into those of the later discovered brain tumor, the lapse of more than a few days between mild head injury and brain tumor manifestations would weigh heavily against blaming the head injury for the latter. An arbitrary limit to the longest time interval still considered significant cannot be placed. The latter is necessarily dependent upon the presence of a definite continuity of symptoms from the time of trauma to the time when definite tumor symptoms appear. If a prolonged, symptom free interval of weeks or months exists between head trauma and tumor manifestations occurring later, it is unlikely that the trauma would be considered significant as the precipitant of tumor signs and symptoms.

SUMMARY

The importance of head trauma upon the course of brain tumor disease has been presented.

The role of head trauma in precipitating or aggravating the symptoms and signs of intracerebral brain tumor has been presented, with six case histories to illustrate this role.

The pathologic physiology whereby trauma can activate the clinical manifestations of a brain tumor is presented.

The importance of the severity and the site of trauma are discussed, as well as the time interval between trauma and brain tumor symptoms.

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Book Review

THE CARE OF YOUR SKIN, by Herbert Lawrence, M.D., with illustrations. Little Brown and Company. Boston. 1955. Price $2.50.

The title of the book is slightly misleading. It was written for the patient with that embarrassing skin condition, acne. This common dermatosis which is often slighted by the physician is important to the patient. It may cause mental distress not only to the adolescent mind but to the parents as well. To make up for the lack of interest on the part of the family physician, and the lack of time the busy dermatologist can spend with the patient, this little book was written. It seems to me it could well be dispensed along with the lotions, pills and soaps that are usually prescribed for acne.

The subject matter includes about everything that is known about acne. All the false notions about the disease are cleared up: the role of cosmetics, dieting, focal infection, hormones and television miracle products. Modern therapy including x-ray therapy, ultraviolet light, antibiotics, estrogens and psychotherapy are also adequately discussed.

The modern theories regarding the cause of acne are clearly elucidated. The author correctly assigns no single etiologic factor. Of special importance is the discussion of the factors which may bring on a recurrence of the acne lesions. Some of these may be controlled by the patient, some not. Among these causes may be mentioned: emotional tension, menstrual functional conditions, humid weather, occupational contacts with oils or greases, fatigue and dietary indiscretions.

All in all, there is no good reason why the general practitioner who treats the skin and all its contents can not find something of value for his acne patients as well as for himself in this little book. D. W. Winnicott hit the nail on the head when he wrote: "the smallest skin lesion, if it concerns the feelings, concerns the whole personality."

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Agranulocytosis

Associated With Thorazine Therapy

GEORGE W. FORMAN, M.D., AND LUCIEN W. IDE, M.D., *St. Joseph*

CHLORPROMAZINE, a chlorinated phenothiazine (Thorazine S.K.F.), has received extensive publicity in the medical literature as well as in the lay press as being effective and relatively safe in the treatment of certain emotional and mental disorders. It is believed some references to the safety of chlorpromazine have tended to engender a false feeling of security in its use. The numerous complications, ranging from those of minor significance to severe hepatitis, will not be considered in this report. Evidence is accumulating that the serious complication of agranulocytosis may be induced by chlorpromazine with significant frequency.

Five such cases were readily found in the American and British literature: Lomas,[1] in August 1954, reported an instance in which a 69 year old woman was given 75 milligrams chlorpromazine daily, in divided doses for forty-one days. At the end of this period her total leukocyte count was 680 per cubic millimeter with only 11 per cent polymorphonuclear leukocytes. She was mildly febrile. She recovered when the drug was stopped and Cortisone was administered.

In January 1955, Boleman[2] reported a case of a 61 year old white woman who died after taking chlorpromazine. She suffered from hypertensive vascular disease. Chlorpromazine was started after she had taken an overdose of barbiturates. The dose of chlorpromazine ranged from 30 to 280 milligrams daily. After sixty-eight days a fever of 104.6 F. developed and it was found that her total white blood cell count was 525 cells per cubic millimeter without the presence of granulocytes. Her bone marrow was found to be totally acellular and aplastic. She did not respond to blood transfusions and antibiotics, and died two days after the agranulocytosis was discovered.

In March 1955, Prokopowycz[3] reported a death in a 69 year old woman who had taken 100 to 150 milligrams of chlorpromazine daily. On the fifty-second day of treatment she developed fever of 102.2 F., associated with an ulcerative tonsillitis and pharyngitis. Her leukocyte count at that time was 1,500 cells per cubic millimeter. The differential count revealed 70 per cent lymphocytes, 20 per cent monocytes, 4 per cent myelocytes, 2 per cent eosinophils, but no granulocytes. She was treated with antibiotics and died on the second day of her illness. No bone marrow or autopsy studies were permitted.

On April 16, 1955, Tasker[4] reported a death from agranulocytosis in a 30 year old white female attributed to chlorpromazine therapy. The dose was 75 mg. daily for nine days followed by 150 mg. daily. On the twelfth day of treatment she revealed mild fever and lassitude lasting two days, followed by dark urine, pale feces and jaundice, all of which subsided on the seventeenth day. A rash developed on the nineteenth day, subsiding two days later. On the forty-first day of treatment, the appearance of ulcerated gums and tongue and mild fever were accompanied by a white blood cell count of 900 cells, 10 per cent of which were polymorphonuclear leukocytes. The drug was stopped. The patient died eight days later. Autopsy was not permitted.

Another death was reported by Hodges and LaZerte[5] in May 1955. This was a 67 year old woman who developed epigastric pain, fever, chills and a slight jaundice thirty-one days after her first dose of chlorpromazine. She had received 50 milligrams a day for twenty days. Agranulocytosis was apparent twelve days after the onset of her illness and she died two days later. A hypoplastic bone marrow without evidence of maturity of the agranulocytic series beyond the myelocytic stage was revealed at autopsy. She had been known to have had an unexplained leukocyte count of 45,500 consisting principally of lymphocytes which had been present before the administration of the chlorpromazine. Progressive jaundice developed thirty days after institution of chlorpromazine and persisted until death.

CASE REPORT

Mrs. C. T., a white married woman, aged 73 years, was first examined at the Thompson, Brumm and Knepper Clinic on April 1, 1955. Her chief complaint was intense nervousness of one and one-half years' duration. It followed herpes zoster involving the right side of her chest which was complicated by pain which had persisted for several months.

The history indicated that in September 1954 the patient began having precordial pains with migration down her left arm. Her physician gave her nitroglycerine because he thought she had "myocardial damage of mild degree." She was hospitalized from February 27, 1955, to March 5, 1955, at which time her physical examination was normal. The nonprotein nitrogen and blood sugar were 38 and 116 mg. per cent, respectively. A blood examination showed 13.05 gm. per cent hemoglobin, 4,380,000 erythrocytes per cubic

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Consultant, Neurology and Psychiatry, Thompson, Brumm & Knepper Clinic.
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millimeter, and 6,200 white blood cells per cubic millimeter, 64 per cent of which were polymorphonuclear leukocytes. An x-ray of the chest revealed no abnormalities.

Examination revealed a tense, agitated woman with a clear sensorium. Her weight was 116 lbs. Her blood pressure was 160 systolic and 80 diastolic. The pupils were round, equal and reacted to light directly and consensually and in convergence. Her ocular fundi were normal. There was no strabismus, ptosis or nystagmus. Her throat was normal. The thyroid gland was not palpable. The heart tones were normal, the rhythm regular and there were no murmurs. Her chest was normal. There were numerous keratotic senile plaques over the chest and abdomen. The abdomen was soft, without tenderness or masses. The liver and spleen were not palpable and her pelvis was normal.

The urine examination revealed completely normal findings. A blood examination shows 10.3 gm. per cent of hemoglobin, erythrocytes 3,500,000 and white cells 7,900 per cubic millimeter. A differential count was not made. The sedimentation rate (Westergren) was 35 mm. in one hour.

Chlorpromazine (Thorazine S.K.F.) was started on April 1, 1955, in doses of 25 mg. four times daily. On April 13 there was only limited improvement and chlorpromazine was increased to 25 mg. five times daily. On April 16 the dosage was increased to 150 mg. daily and on April 21 it was increased to 200 mg. daily. She continued to show limited emotional improvement. She received 0.5 gm. of Doriden (Ciba) at bedtime to sleep and 0.25 gm. of Doriden one to three times daily for sedation. On May 23 she complained of a painful and swollen right eyelid. She was seen by an ophthalmologist on May 24, who diagnosed a chalazion of the right upper lid, which was treated effectively by a local antibiotic. On May 26, the eye was greatly improved, but she complained of having had a slight sore throat the evening before. The posterior pharynx was mildly diffusely red. A blood examination showed a white cell count of 750 cells per cubic millimeter, all of which were lymphocytes. The chlorpromazine was stopped. Her temperature was normal. She received on that day and each day thereafter 400,000 units of penicillin intramuscularly, Panmycin (Upjohn) 250 mg. by mouth three times daily and Cortisone 25 mg. twice daily. She was given 80 units of A.C.T.H. intramuscularly daily for four days. This was discontinued because of a blood pressure elevation to 198 systolic and 88 diastolic. She remained afebrile for four days. On the fifth day her temperature was elevated to 100 F. The throat remained normal.

She was admitted to the Missouri Methodist Hospital on June 1, 1955, with a fever of 102.6 F. A blood examination on June 2, 1955, showed hemoglobin of 10.85 gm. per cent, erythrocytes 3,610,000 and 1,600 lymphocytes per cubic millimeter, but no granulocytes. Doriden was discontinued on admission to the hospital. In addition to the above medication she received Cortisone 100 mg. intramuscularly twice daily on June 3, and 50 mg. intramuscularly twice daily each day thereafter until death. Her fever varied from 100 F. to 105 F. The white cell count varied from 950 to 1,600, but granulocytes were continuously absent. Bone marrow obtained by sternal aspiration on June 6 showed maturation arrest of myelopoiesis at the myeloblastic stage. Other cellular elements appeared normal.

On the morning of June 6, she was stuporous. Her respirations were 48 per minute, the pulse was 120 per minute, and the temperature was 100 F. Her physical condition rapidly deteriorated and she died at 12:01 p.m. Autopsy confirmed the clinical findings. There were no evidences of malignancy.

DISCUSSION

It is apparent that the patient had a complete selective suppression of myelopoiesis, leaving other blood elements unaffected. Preceding her last illness she had received no medication other than chlorpromazine, Doriden (Ciba) and nitroglycerine. So far as we know, the other drugs have never been associated with agranulocytosis.

Chlorpromazine was first administered in the Psychiatric Section of the Thompson, Brumm and Knepper Clinic in October 1954. Since then there have been sixty-five cases treated with chlorpromazine. This is an incidence of agranulocytosis in chlorpromazine treated cases in this Clinic of 1.69 per cent. It is realized that this group is too small to be statistically significant. The minimum dose in these treated cases was 40 mg. daily and the maximum dose was 600 mg. daily. In the reviewed cases the minimum daily dose in which agranulocytosis developed was 50 mg. and the maximum daily dose was 280 mg. This suggests that development of this complication is not dependent upon high dosage but rather upon susceptibility of certain individuals to this drug.

All of the reported cases have been in women but these reports are too few to draw conclusions regarding sex susceptibility to the toxic effects of chlorpromazine. The age range has been from 38 years to 73 years, five of them being over 61 years. This suggests that there is a greater susceptibility to chlorpromazine after the age of 60, but danger still exists at earlier ages.

The time between the onset of treatment and appearance of symptoms in these cases ranged from forty-one to sixty-eight days. In our case agranulocytosis was discovered on the fifty-sixth day of treatment.

In the four cases in which there were no granulocytes in the peripheral blood, death occurred in each instance. In the two cases in which polymorphonuclear cells were detectable in the peripheral blood, one patient recovered and one patient died. This suggests that the prognosis approaches hopelessness when agranulosis develops but that chances for recovery are still possible in the granulopenic stage.

SUMMARY

A case is presented in which agranulocytosis developed in association with the administration of chlorpromazine. Five cases are cited from the British and American literature of agranulocytosis developing in association with chlorpromazine

therapy. It is believed that these reports are sufficient to merit caution in administration of this drug.

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Problem of Softened Water in Low Salt Diets

W. A. SODEMAN, M.D., AND DALLAS MEYER, PH.D., *Columbia*

THE DIFFERENCE in salinity of the water supply in various geographical areas of the United States is a well known problem in the construction of low salt diets. In some areas the sodium content of the water may be as high as 300 mg. per liter but generally is in the range of 2 to 50 mg. per liter.[1] In Columbia, in the central part of Missouri, the sources of supply are four wells 1,100 to 1,500 feet deep. Water analysis by the U. S. Geological Survey of specimens from these wells indicates 44 ppm. of sodium (44 mg. per liter) and a total hardness, as $CaCO_3$, of 270 ppm.[2]

The hardness of the water in Columbia is such that it is common practice to use water softeners in the home. These, in large part, are resin softeners donating sodium to replace calcium and magnesium. If efficiently operated, these units would then give about 168 ppm. of sodium in the finished softened water as calculated from the total hardness of the water. This represents 7.3 mEq. or 168 mg. per liter.

The use of such water in the community varies greatly since it is a problem of personal household service. In some homes no softening is carried out. In others only the hot water is treated and, finally, the hot and cold water in some. The efficiency of these units depends upon their care. In rental units regular servicing is done by the rental agency on varying regular schedules depending upon utilization of water. In personally owned units, care depends upon service by the owner or his agent, frequently on irregular schedules.

Because of the number of variables involved in consumer supplies of softened water and because of the high level of sodium theoretically possible in the softened water in Columbia it was felt that it was desirable to make determinations on a number of supplies to establish the actual sodium content. Samples were collected in new pyrex bottles thoroughly rinsed with water from the supply to be tested. Determinations of the sodium content were made with the Beckman flame photometer. The results obtained are shown in tables 1 and 2.

Table 1 shows determinations made on selected outlets in the University buildings. Station I represents the Noyes Hospital supply in which both hot and cold water were treated.* Because of the large volume used and the employment of a reserve softener for a portion of each day during the regeneration of the regular unit, frequent determinations were made. Wide fluctuations are in evidence, ranging from 57.5 to 253 mg. per liter. The latter figure represents a value in excess of the theoretical calculated possibility. This is due to collection of a sample immediately after a regeneration was done. At that time water is run through the unit until excess salt is washed out. Short of adequate completion of this process high salt values remain, and the water may have sufficient sodium chloride in it to impart a salty taste.

TABLE 1.

DETERMINATIONS OF SODIUM CONTENT OF WATER ON SELECTED OUTLETS IN UNIVERSITY BUILDINGS

Station	*Date*	*Time*	*mEq./L*	*mg./L*
I.	4/5/54	8:00 a.m.	3.0	69.0
		11:30 a.m.	7.8	179.4
		3:00 p.m.	7.8	179.4
	4/8/54	8:30 a.m.	3.3	75.9
	4/13/54	9:00 a.m.	3.8	87.4
		1:00 p.m.	7.3	167.9
		4:00 p.m.	7.3	167.9
	4/16/54	9:00 a.m.	2.5	57.5
		1:00 p.m.	6.6	151.8
		4:00 p.m.	11.0	253.0
II.	4/2/54		2.8	64.4
	4/13/54		2.1	48.3
	4/21/54		2.3	52.9
	5/3/54		2.1	48.3
III.	4/1/54		7.3	167.9
	4/2/54		7.4	170.2
	4/3/54		6.3	144.9
	4/5/54		7.2	165.6
	4/7/54		7.8	179.4
	4/8/54		7.8	179.4
	cold water samples			
	4/1/54		2.3	52.9
	4/7/54		2.4	55.2
IV.	3/31/54		7.5	172.5
	4/1/54		6.5	149.5
	4/2/54		6.0	138.0
	4/3/54		6.0	138.0
	4/5/54		2.4	55.2
	4/6/54		5.2	119.6
	4/7/54		6.0	138.0
	cold water samples			
	4/1/54		2.2	50.6
	4/5/54		2.1	48.3

Station II, in McAlester Hall, the Medical School building, represents a portion receiving no softening. Stations III and IV were in a men's dining hall and a women's dormitory in which only the hot water was treated. Here, too, an occasional sample was obtained when the softening process was inactive and in variable stages of partial efficiency.

Table 2 gives samples taken from private homes in the area. Stations A and C were rental units maintained by a commercial organization. In these a greater constancy is seen. Station B represents a private home in which the owner maintained the softening unit. Here there is slightly greater variability. Station D was an apartment house in which the manager maintained the unit. Here again there is greater variability including a period in which regeneration was completely neglected

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* Because of this study changes have been made in the treatment of the water.

and the values equalled the untreated supply. In this unit the cold water was not treated. Station E represents a private home without a softener.

TABLE 2.

DETERMINATIONS OF SODIUM CONTENT OF WATER ON SAMPLES FROM PRIVATE HOMES

Station	*Date*	*mEq./L*	*mg./L*
A	3/29	7.5	173
	3/30	8.0	184
	3/31	7.8	178
	4/2	7.0	161
	4/6	7.0	161
	4/9	6.6	152
B	3/30	7.8	178
	3/31	8.4	192
	4/1	8.4	192
	4/3	7.4	170
	4/7	7.5	173
	4/10	4.3	99
C	4/8	5.9	136
	4/9	8.0	184
	4/10	8.0	184
	4/12	7.8	178
	4/16	7.8	178
	4/19	7.5	173
D	4/2	6.8	156
	4/3	7.8	179
	4/4	7.5	173
	4/5	7.2	164
	4/12	2.2	51
	4/12 cold*	1.8	41
	4/16	1.8	41
	4/19	1.8	41
	4/23	1.8	41
	4/23 cold*	1.8	41
E	4/1	2.1	48
	4/7	1.8	41
	4/21	1.9	44

*samples marked *cold* are from untreated supply

For comparison several samples were taken from the water supply of Boonville, Missouri, a town 22 miles distant receiving as its water supply treated Missouri River water. The values for sodium were, at the Filtration Plant, 1.7 mEq. or 39 mg. per liter, and in the St. Joseph's Hospital softened supply (utilized for laundry purposes only) 4.5 or 105.8 respectively.

DISCUSSION

It is obvious that the samples analyzed from a single source showed great variability in the sodium values from time to time depending upon the care and maintenance of the units. With the softening process employed, sufficient sodium is donated so that, if such water is taken in the usual quantities, a rigid low sodium diet would not be possible. For example, one liter of such water commonly represents 160 to 175 mg. of Na. In addition the values indicate that, with the variability in maintenance, especially in owner maintained units, one cannot be certain of the sodium content. In the hospital and apartment, units in which large and varying volumes of water are utilized and the capacity reached in shorter intervals, great variability occurs despite regularly planned maintenance.

Where hot water only is treated the water ingested as such may come almost exclusively from the untreated cold supply and the problem does not arise. Still, in these cases hot water may be utilized in soups, beverages and other foods prepared with water, giving a variable and unknown quantity of salt. In the preparation of foods containing more salt than the water itself the water may still reduce the salt content of the food if not utilized in final servings. However its efficiency in this respect is reduced.

Hulet[3] determined the sodium content of tap water used in preparation of low salt diets and found variations from 0.30 to 4.85 mEq. per liter. He emphasized the importance of evaluating hospital water supplies when planning a program of low sodium diets and advised a check on the water on several occasions because of the relative wide variation in the concentration of sodium. Certainly findings confirm his statements and also indicate that the water supply could nullify efforts to provide a regimen of sodium restriction.

SUMMARY

Utilization of water softening processes which donate sodium was found to increase variably the sodium content of the water, depending upon the degree of hardness and concentration of ions replaced by sodium, and upon the care and maintenance of the softening units involved. In the geographic area studied values of sodium may reach levels, depending upon the amounts of water used, sufficient to nullify efforts to maintain a low sodium regimen. This can be corrected by use of unsoftened water for cooking and drinking, and, if the content of untreated water is high enough in sodium to be a factor, by use of distilled water or bottled water of known low sodium content, at least for drinking.

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What About Syphilis?

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As LONG AS THE human race propagates itself, the means by which this world is repopulated will not become unpopular. If one breaks the social amenities often all is forgiven but, sometimes, there are the hazards of syphilis and gonorrhea, and if the source of the trouble is not detected at once through the efforts of an expert case finder, the contactees contracting early syphilis may reach scores in numbers from one infected individual. Syphilitic disease has a mathematical phase. The number of those infected with the disease theoretically increases inversely as the square of the distance from the single source of infection. Several such small epidemics have occurred in certain parts of this state in which one individual was the cause for infection of more than twenty others. Such small whirlpools of disease are continuously bobbing up in different parts of the state, especially in the smaller communities, and will continue to do so. Were it not for the efforts of the expert personnel who look into this situation and detect these cases, the disease could become a small epidemic even at the present time.

After it had been discovered that penicillin was a specific for syphilitic disease and gonorrhea it was but a short time until predictions were made by certain individuals, who should have known better, that this disease in its early stages would practically be wiped out in ten years and that thereafter treatment would consist largely of retreating those individuals who had been treated by the prehistoric and barbarous regime in which arsphenamines and bismuth were the standbys. Erlich made the same mistake in his prophecies when he proclaimed the dictum that one large dose of arsphenamine would cure syphilis (therapia sterilisans magna) and in a short time reduce the numbers infected to such an extent that it would no longer be a menace to the human race.

The fact is that of all the serious contagious diseases in the United States today syphilis occupies the third place instead of the first place as it used to do. It is still a formidable disease. The reported cases of syphilis and gonorrhea in Missouri for the following calendar years are:

Year	*Syphilis*	*Gonorrhea*
1950	5,753	4,483
1951	5,170	4,261
1952	4,541	4.367
1953	3,350	3,913
1954	2,992	3,577
	21,806	20.601

Cases of syphilis and gonorrhea reported to the Public Health Service by State Health Departments for those years are:

Year	*Syphilis*	*Gonorrhea*
1950	229,723	303,992
1951	198,640	270,459
1952	168,734	245,633
1953	156,099	243,857
1954	137,876	239,661
	891,072	1,303,602

There is more gonorrhea reported than syphilis nationally and the reduction in the total number of the former disease is considerably slower due to the fact that many women contract gonorrhea of such a mild nature that they are unaware of it but are just as infectious as if they had the severe type. It is seen from the reports from 1950 to 1954, a period of five years, that syphilis was reduced by one half in the State of Missouri, while nationally the figures were approximately true also. Thus it is an established fact that the incidence of syphilitic disease and gonorrhea have decreased, but as the years go on the reduction is smaller and smaller. In more than 235,000 serologic tests done in the last fiscal year by the Missouri State Medical Laboratories between 9 and 10 per cent were positive, which is an extremely high percentage until one considers the fact that a great many of these serologic tests were done one, two or even three times on the same individual. Granting that the duplications were one half in these suspected cases, it would still mean that 5 per cent of the tests would be positive and, in most instances, would indicate that the patient had syphilis.

The reduction in the number of syphilitic patients in the great cities like St. Louis, Kansas City and St. Joseph is much more apparent than it is in the rural districts where the percentage of reported early cases were only 3 per cent less this year than in the last one. It is gratifying to know that there has been this great reduction in the number of syphilitic cases not only in the State of Missouri but in the United States. In spite of the optimism of many individuals, there will be syphilis for a great many years and in formidable number of cases. In the last five years there were almost 900,000 cases of early syphilis reported in the United States and it must be remembered that probably only a third of these cases have been reported to the proper sources, and that a conservative estimate of the number of new syphilitic cases would be closer to 3,000,000 and, likewise, the number of cases of gonorrhea. Dr. Charles R. Rein of New York City believes that syphilis is on the increase in certain states, not markedly so, but some increase. It is feared that there may be an upsurge of this disease again, especially if there is a state of war.

What are the factors that will cause this increase or, conversely, what are the factors responsible for the slow reduction of syphilis in the last four years? First, only the older medical men who saw syphilis in the prepenicillin days are syphilis conscious. They saw enough of these cases at that time, of all types, to be able to recognize a primary lesion or early syphilitic eruption. The great majority of young doctors who have graduated since the penicillin regime was instituted have never seen a primary lesion, a secondary eruption or a mucous patch and consequently do not recognize them when they see them. They are also unfamiliar with the operation of the darkfield illuminator and probably would not recognize a Spirochaeta pallida even if they say one in the darkfield. Second, the worst part is the attitude that the intelligent layman has about this disease. Due to familiarity with the blatant articles written in the lay magazines, he is of the opinion that syphilis has been practically wiped out and that if one does contract it, a few doses of penicillin will eliminate it. He is correct in the second assumption but sadly mistaken in the first.

No one knows really how much reduction there has been in the number of syphilitic cases during the last ten years. Someone has said that it should be reported as pneumonia or erysipelas are reported, that it should be considered one of the contagious diseases, but the answer to that is, there is no fun in getting pneumonia and, as such, no shame would be attached to it. It is not contracted in the same way and as long as human beings have any decency they are not going to openly discuss their libidos. For similar reason it will be impossible to report all of these cases by name. It is reasonably certain that only about one third of the cases of social diseases are reported.

Only trends can be ascertained from a statistical study of these diseases. The Committee on Control of Venereal Disease has been trying for years to get all of the private laboratories and hospital laboratories to report the total number of serologic tests they have done and the percentage of positive reactions they have obtained. The main objection to this method of collecting data is the fact that there are many duplicates, that is, persons having their serologic tests done in one, two or three laboratories, but this is no objection to the total effort. One year's figures would not be of much value but ten years' would. This material could be gathered now from 1945 until the present from all these sources and one could certainly see from the compilation of these figures whether there had been a substantial reduction in the number of positive serologic tests. Most of the modern hospitals make these serologic tests routinely and certainly the private laboratories would have their figures. There is no doubt but that there has been a great reduction in the numbers of those who have syphilis, not only because of modern treatment but because of the fact that the antibiotics, especially penicillin, have been used on millions of people suffering from the common cold, pneumonias and other bacterial diseases in which it was not known that syphilis existed in the patient.

It can be safely estimated that at least 25 per cent of syphilitic individuals do not know they have the disease and in a great many instances discover it by accident if they discover it at all.

This article was written with the idea of reacquainting both the medical profession and the laity with the fact that syphilitic disease is still a formidable factor in the list of contagious diseases in our country. Millions of people are still suffering from this disease. The numbers of new cases reach into the hundreds of thousands in the United States each year. In order to control this disease and gradually eliminate it as a formidable factor in the health problem of this country a system of education must not only continuously be carried on but stressed more. There must be a better system of case reporting with the general understanding that the information is gathered for statistics only.

1524 Professional Building.

The figures were given by Doctor Belden of the State Health Department.

Book Review

REVIEW OF MEDICAL MICROBIOLOGY, by Ernest Jawetz, Ph.D., M.D., Professor of Bacteriology and Lecturer in Medicine and Pediatrics, University of California School of Medicine, San Francisco; Joseph L. Melnick, Ph.D., Professor of Epidemiology, Yale University School of Medicine, New Haven; Edward A. Adelberg, Ph.D., Assistant Professor of Bacteriology, University of California, Berkeley. Lange Medical Publications, Los Altos, Calif. 1954. Price $4.50.

This book is a comprehensive review of bacteriology including the fungi and the viruses related to the field of medicine. A valuable chapter on chemotherapy and antimicrobial drugs is up to date. The appendix has two lists, one on viral disease of animals and the other on vaccines for attempted prevention of virus infections of animals. The bibliography has seventeen references and a list of the journals dealing with microbiology. The index is complete and adequate.

This publication was written primarily for the microbiology student and medical practitioner. However, it is a good reference book for the present day laboratory. F. J. C.

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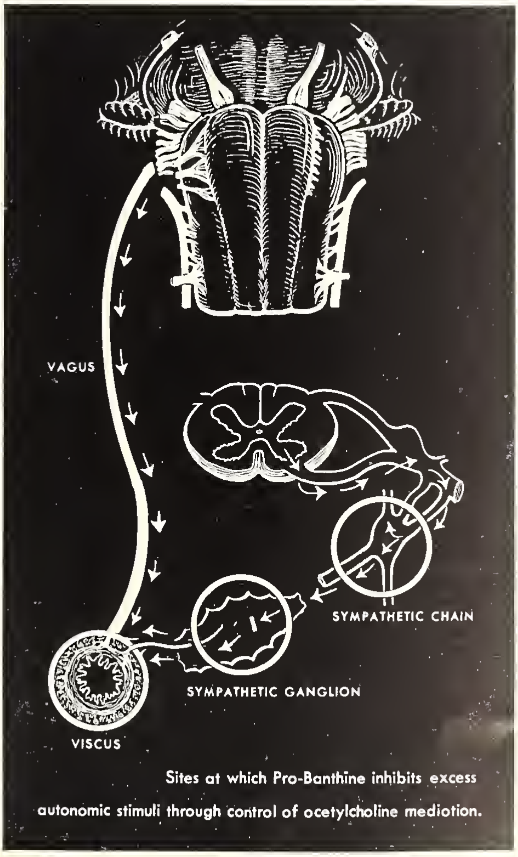

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1. Schwartz I. R.; Lehman, E.; Ostrove, R., and Seibel, J. M.: Gastroenterology *25:*416 (Nov.) 1953.
2. Roback, R. A., and Beal, J. M.: Gastroenterology *25:*24 (Sept.) 1953.

SEARLE

Postgraduate Review

Rheumatoid Arthritis in the Aged

JACK ZUCKNER, M.D., *St. Louis*

THE DIFFERENTIAL diagnosis of the various arthridites frequently is influenced by the age of the patient. Arthritis developing between the ages of 20 and 40 is in most instances rheumatoid arthritis. In children a variant of rheumatoid arthritis, Still's disease, is often observed. The diagnosis of degenerative joint disease (osteoarthritis) is not usually entertained in the above age groups unless there is a predisposing history of an orthopedic deformity, trauma or infection. After the age of 50, the rheumatic disease most commonly diagnosed is osteoarthritis.

The purpose of this paper is to emphasize the not infrequent onset of rheumatoid arthritis after the age of 50, a diagnosis too often overlooked because of a lack of knowledge of its occurrence during these years. It is worthy of comment that the literature is, at most, scant on rheumatoid arthritis in the aged, whereas, rheumatoid arthritis in children comprises a voluminous bibliography. Why rheumatoid arthritis in older age groups has received so little attention is difficult to comprehend.

The most comprehensive reports on this subject are by Schnell[1] and by Cecil and Kammerer.[2] Schnell[1] reviewed forty-one cases of rheumatoid arthritis in whom the onset of disease was after the age of 55; one patient was aged 83. It was his opinion that the rheumatoid process in his elderly patients showed a "predilection for the surroundings of the large joints" rather than the small joints of the hands and feet. In addition, a high sedimentation rate, a long drawn out course, and a more serious prognosis were more characteristic in patients above the age of 55.

Cecil and Kammerer[2] reviewed 100 cases of rheumatoid arthritis developing at or after the age of 60. Of interest in their report was an equal sex incidence contrary to the two or three to one predominance of females in younger individuals. The course of the disease in their patients varied from quite mild to quite severe, and was slowly to rapidly progressive, similar to the characteristic description of rheumatoid arthritis. The frequency with which the disease was first noted in the shoulder was emphasized, sometimes almost resembling a typical shoulder-hand syndrome at its onset. However, the joints most frequently involved in their series were the small joints of the hands. Laboratory studies often revealed high sedimentation rates and also a decreased incidence of secondary anemia as compared to the general description of the disease for all age groups.

Twenty-three patients with rheumatoid arthritis developing after the age of 50 are included in this report. Table 1 records the essential data.

Only five patients were males. The age at onset of the disease varied from 51 to 75 with three patients in the seventies. Duration of the disease varied from two months to eighteen years. Knee joints were first to be involved in eight of the patients, and the shoulder initially in only five individuals. Most peripheral joints eventually showed evidence of rheumatoid arthritis, and there was no characteristic predominance of any particular joint. An additional two patients had temporomandibular joint involvement; and subcutaneous nodules were found in two others. Sedimentation rates varied from 6 to 60 mm. per hour. A mild anemia was present in a few instances. The disease varied from mild to severe and periods of remission and relapse were common. Medications included gold salts in fifteen individuals, cortisone or hydrocortisone by oral administration in sixteen, phenylbutazone (butazoladin) in eleven, intraarticular injections of hydrocortisone in fourteen, and salicylates in all. Response to these various forms of therapy was similar to that described for rheumatoid arthritis in general. Gold salt therapy was discontinued in three patients because of possible toxicity. Hydrocortisone caused an increase in glycosuria in a diabetic individual (10), but not severe enough to warrant discontinuation of the drug.

CASE REPORT

A 66 year old white female was seen in the Arthritis Clinic at Firmin Desloge Hospital complaining of severe pain and swelling in her hands and wrists of a few weeks duration. For the year prior to the present complaints there was intermittent soreness and stiffness in both shoulders causing only little discomfort. There was also involvement of both knees with pain and swelling beginning fourteen years previously, but this was not constant and it had been responding satisfactorily to salicylate therapy. X-rays at the onset of symptomatology in the knees revealed osteoarthritic changes in the latter.

Two sisters of the patient had arthritis, the type not known.

Past history included surgery twenty years ago at which time both ovaries and appendix were re-

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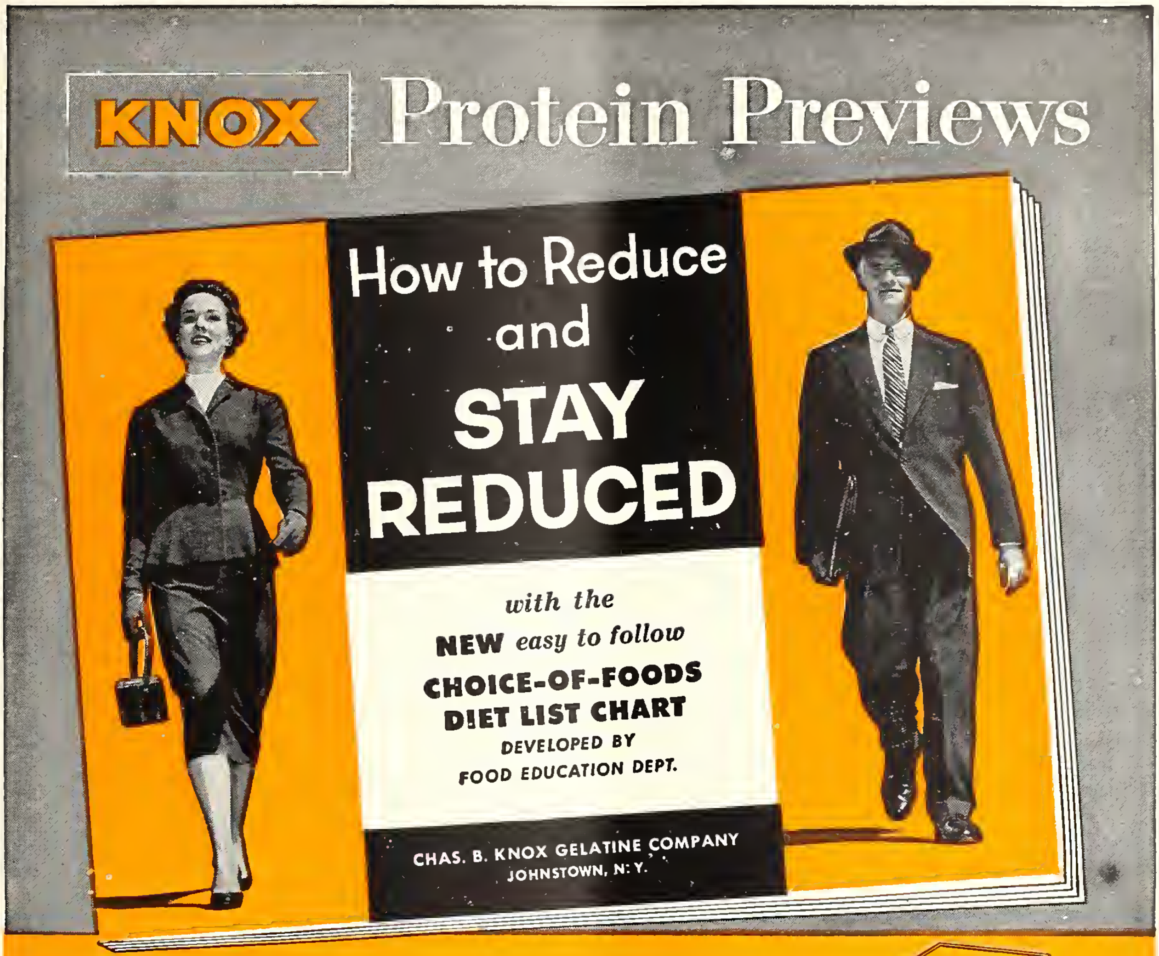
From the Department of Internal Medicine, St. Louis University School of Medicine, and Arthritis Clinics of Firmin Desloge and Jewish Hospitals.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[1] Developed by the U. S. Public Health Service assisted by committees of The American Diabetes Assn., Inc. and The American Dietetic Assn.

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moved. Further information relative to this surgery was not available. In the past eight to ten years cardiac symptoms of dyspnea on exertion, ankle edema, paroxysmal nocturnal dyspnea, orthopnea and substernal "pressure-like" pains gradually developed. Hypertension was known for fourteen years.

Examination of the joints revealed one plus capsular thickening about most proximal and distal interphalangeal joints and metacarpalphalangeal joints of both hands. There was also slight swelling over the dorsum of both hands. The patient was capable of closing her fists to about 80 per cent of normal. The wrists revealed 1 plus synovitis with approximately 60 per cent of the normal range of motion. The soft tissues about the knees were slightly thickened and flexion in each knee was limited by 20 degrees. Tenderness was present in all these joints and also in the shoulders and ankles, but the latter were without detectable swelling. A mild kyphosis and scoliosis with convexity to the right were present in the dorsal vertebrae.

The heart was enlarged to percussion and a grade 3 systolic murmur was heard at the apex and base. The blood pressure was 218 systolic, 106 diastolic. Occasional crepitant rales were heard in the base of the right lung. Evidence of myocardial damage and an incomplete right bundle branch block were present on the electrocardiogram.

Roentgen examination of the hands revealed a mild generalized osteoporosis, and soft tissue swelling was observed around involved joints. The metacarpal greater multangular joints of both hands and several distal interphalangeal joints revealed hypertrophic spurring. Repeat films of the knees showed the same osteoarthritic findings as previously.

The lack of typical rheumatoid changes in both knees suggested that a diagnosis of osteoarthritis in the knees was probably correct. Whether or not a superimposed rheumatoid process of shorter duration was present in the knees without x-ray changes was impossible to determine. The shorter duration of hand and wrist involvement would be consistent with the failure to find typical rheumatoid changes in the x-ray. The roentgen observation of osteoporosis in the bones of the hands and the clinical involvement of metacarpal-phalangeal joints, wrists and other hand joints are characteristic of rheumatoid arthritis. The hypertrophic changes in the metacarpal greater multangular and distal interphalangeal joints of both hands are not unusual in this age group indicating that osteoarthritis was present in addition to rheumatoid arthritis.

Laboratory results included the following: red blood cells, 4.17 million per cu. mm., white blood cells, 7750 per cu. mm., hemoglobin, 13.5 grams per 100 cc., and a normal differential. Urinalysis was normal. Elec-

TABLE 1. Data on Rheumatoid Arthritis in the Aged

Patient	*Sex*	*Age at Onset*	*Duration of Disease (years)*	*Joint Initially Involved*	*Joints* Involved*	*Classification***		*ESR*** (mm./hr.)*	*RBC (million)*	*HB (gms.)*	*Treatment*****
						Stage	*Class*				
1.	F	53	18	Knee	K,S,E, J,W,F,	II	II	36	——	13.4	S
2.	F	57	3½	Knee	K,F,W, E,S,A	III	III	38	3.98	11.0	E,IAF,S
3.	F	65	1	Shoulder	F,K,W, E,S,A	II	III	22-38	4.17	13.5	E,P,Au,S
4.	F	71	4	Wrist	W,F,K	III	II	33-43	4.39	13.2	S
5.	F	60	15	Knee	F,K,H	I	II	45	4.13	12.1	Au,P.IAF,S
6.	F	75	2	Knee	K,F,W,S	I	II	6	4.00	11.4	Au,P,F,IAF,S
7.	M	53	2	Ankle	A,W,F K,E,T	II	II	48	4.20	11	Au,E,IAF,S
8.	F	57	2	Finger	F,W,S,A,K	III	II	——	4.50	——	Au,E,IAF,S
9.	F	73	1/12	Finger	F,S,A,K, E,T,W	II	III	51	4.40	12.5	E,Au,S
10.	F	55	3	Finger	F,S,K, A,W,E	III	II	60	——	——	E,F,S
11.	F	64	1	Knee	K,F,F	I	II	18-40	4.45	13.5	S,Au,E,P,IAF
12.	M	54	4	Shoulder	S,F,T,W, E,K,J	IV	IV	——	4.20	12.0	S,Au,E,IAF,P
13.	F	55	1	Wrist	W,K,F, T,S,A	III	II	——	3.65	——	Au,E,IAF,S
14.	F	59	8	Knee	W,K,F	II	II	28-34w	3.61	11.7	S,Au,IAF,E,P
15.	F	57	2	Ankle	A,F,E, S,W	I	II	42	4.20	12.5	E,P,Au,S
16.	M	53	10	Shoulder	S,F,K, A,E,W	III	III	36	4.76	14.4	Au,P,IAF,S
17.	M	51	6	Shoulder	S,F,E,K, A,T,W,H	II	II	10-38	4.94	14.6	Au,P,E,S
18.	M	57	7	Knee	K,A,W, E,H	II	II	53	4.04	11.5	E,IAF,S
19.	F	52	3	Finger	F,W,S,K	II	II	56w	3.95	10.7	Au,IAF,S
20.	F	64	2	Finger	F,K	II	II	42w	4.41	13.4	IAF,P,S
21.	F	52	2	Shoulder	S,W,E, K,F	I	II	33	4.72	13.1	P,S
22.	M	62	3	Wrist	W,S,K, E,F	III	III	40	3.42	12.7	Au,E,IAF,S
23.	F	52	4	Knee	K,F,H, W,A	IV	III	37	4.10	13.0	S

* Joints Involved: K (knees), S (shoulders), E (elbows), F (fingers), T (small joints of feet), A (ankles), W (wrists), H (hips), J (jaw)

** Classification: American Rheumatism Association Criteria[3]

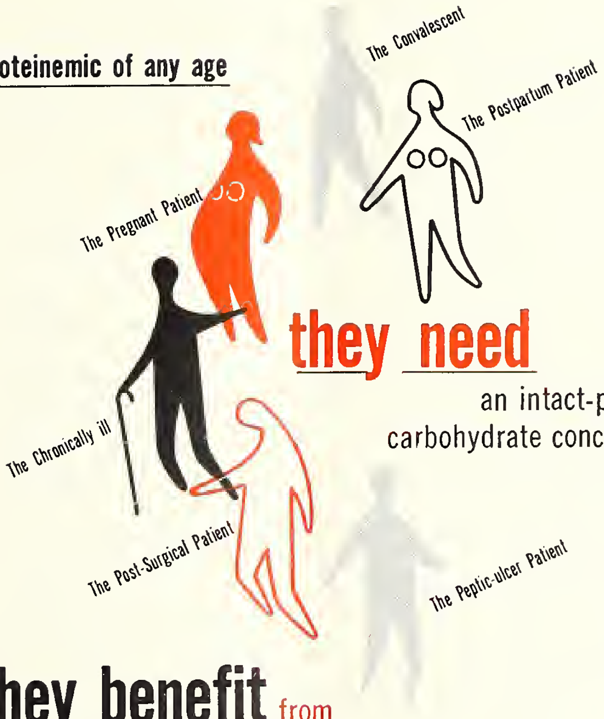
Stage: Classification of Rheumatoid Progression

Class: Classification of Functional Capacity

*** E S R: Sedimentation Rate—Wintrobe Method except where marked with W for Westergren Method

**** Treatment: S (salicylates), E (cortisone acetate), F (hydrocortisone acetate), IAF (intraarticular hydrocortisone acetate), P (phenylbutazone), Au (gold salts)

The hypoproteinemic of any age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trolyte determinations for sodium, chloride and potassium were normal.

Numerous medications were tried. Phenylbutazone in 200 mg. doses three times daily for three days was without effect. Chrysotherapy was discontinued because of pruritus and development of 6 per cent eosinophilia after a total dose of 285 mg. of gold sodium thiomalate (myochrysine) was administered. The latter was of questionable therapeutic value. Salicylates, paraffin dips and infrared were not helpful. Cortisone acetate, starting with 300 mg., then 200 mg., and 100 mg. on successive days, and continuing with 100 mg. daily for a short period resulted in objective evidence of decreased synovitis and increased range of joint motion. However, the patient with her marked degree of anxiety did not admit to any subjective improvement. It was, therefore, thought advisable to discontinue this therapy rather than subject the patient to possible further cardiac difficulty. At the present time, she is being treated with salicylates and is responding poorly. The patient was also digitalized and maintained on a low salt diet.

DISCUSSION

Of eight patients whose joint involvement began in the knees, an erroneous initial diagnosis of osteoarthritis was made in five. The knee joints may be difficult to evaluate early in the course of rheumatoid arthritis in the aged because x-rays will show hypertrophic changes in weight bearing joints of most elderly individuals, and it will be extremely difficult to determine if there is a superimposed rheumatoid process. Also, many of the joints with hypertrophic changes in x-ray may be asymptomatic as well as symptomatic causing further difficulty in evaluation. The sedimentation rate, usually of help in the differential diagnosis since it is characteristically described as normal in osteoarthritis and elevated in rheumatoid arthritis, may in a small percentage of patients give the reverse, that is, elevated and normal values respectively. Other laboratory measures such as sheep cell agglutinin and streptococcus agglutination tests are many times unreliable because of the 10 to 20 per cent false positive or negative results. It is only when other more characteristic joints show evidence of synovitis that the diagnosis of rheumatoid arthritis becomes clear.

The high incidence of females in this series is in contrast to the equal sex ratio in Cecil and Kammerer's[2] group. There is also a difference in the joints initially involved, the shoulder common in their study and less frequent in this series of patients. Sedimentation rates did not show the increased tendency toward higher values as mentioned in their report. The clinical course and laboratory findings in these patients were similar to those usually described for rheumatoid arthritis including remissions, relapses, the various joints involved, response to therapy, mild anemia and elevation in sedimentation rate.

An attempt to explain the differences in sex incidence, sedimentation rate, joints involved and degree of anemia in these cases with those in the literature is difficult. However, if the various reports are totaled and summarized, the impression is obtained that the differences balance out, suggesting that the rheumatoid disease process is probably the same in elderly individuals as in the 20 to 40 age group.

Although there are no specific reports known to me regarding therapy in this age group, it would seem advisable to treat these patients no differently than others with rheumatoid arthritis. Thus, salicylates, gold salts, cortisone, hydrocortisone, phenylbutazone and corticotropin all may be used when indicated. Since this is an older age group in whom there is an increased incidence of hypertension and cardiac disease, cortisone, hydrocortisone, phenylbutazone and corticotropin should be used with greater caution because of the salt retaining properties and resultant edema that may follow therapy with these medications. The use of metacortandracin or metacortandralone may obviate this hazard.[4]

The intraarticular injection of hydrocortisone is of particular value in patients in whom steroids, corticotropin, phenylbutazone and gold salts are contraindicated since this route of administration is devoid of systemic complications when the usual recommended dosage (25 to 50 mg. for large joints) is injected. This form of therapy is best suited for patients with involvement of only one or two peripheral joints, or patients with many diseased joints but having only one or two causing marked discomfort. Its simultaneous use with other more slowly acting forms of systemic treatment is indicated until the latter takes effect, or together with systemic measures which are not adequately controlling symptoms. Approximately 70 to 80 per cent of injected joints will show improvement in pain, stiffness, swelling, degree of synovitis and range of motion.[5, 6] It should be emphasized that this therapy is merely a local treatment and that the results are usually temporary. Beneficial effects may last anywhere from a few days to several months, averaging about two to three weeks.

Other accepted general measures including rest, adequate nutrition, weight reduction where indicated, orthopedic assistance and physiotherapy should not be neglected.

SUMMARY

Twenty-three patients with rheumatoid arthritis beginning after the age of 50 are reported. The disease process in this elderly group resembles that described for younger individuals. Treatment is essentially the same except that greater care is advocated when using salt retaining medications like cortisone, hydrocortisone, corticotropin and phenylbutazone. The increased incidence of a new anti-anxiety factor

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cardiovascular disease in this age group makes these medications potentially more dangerous.

Rheumatoid arthritis must not be overlooked in the differential diagnosis of rheumatic disease in elderly individuals.

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Recent controlled research shows that just 2 or 3 oz. of a dry wine can markedly increase olfactory acuity, increase the desire for food (as in anorexia) and actually aid digestion.

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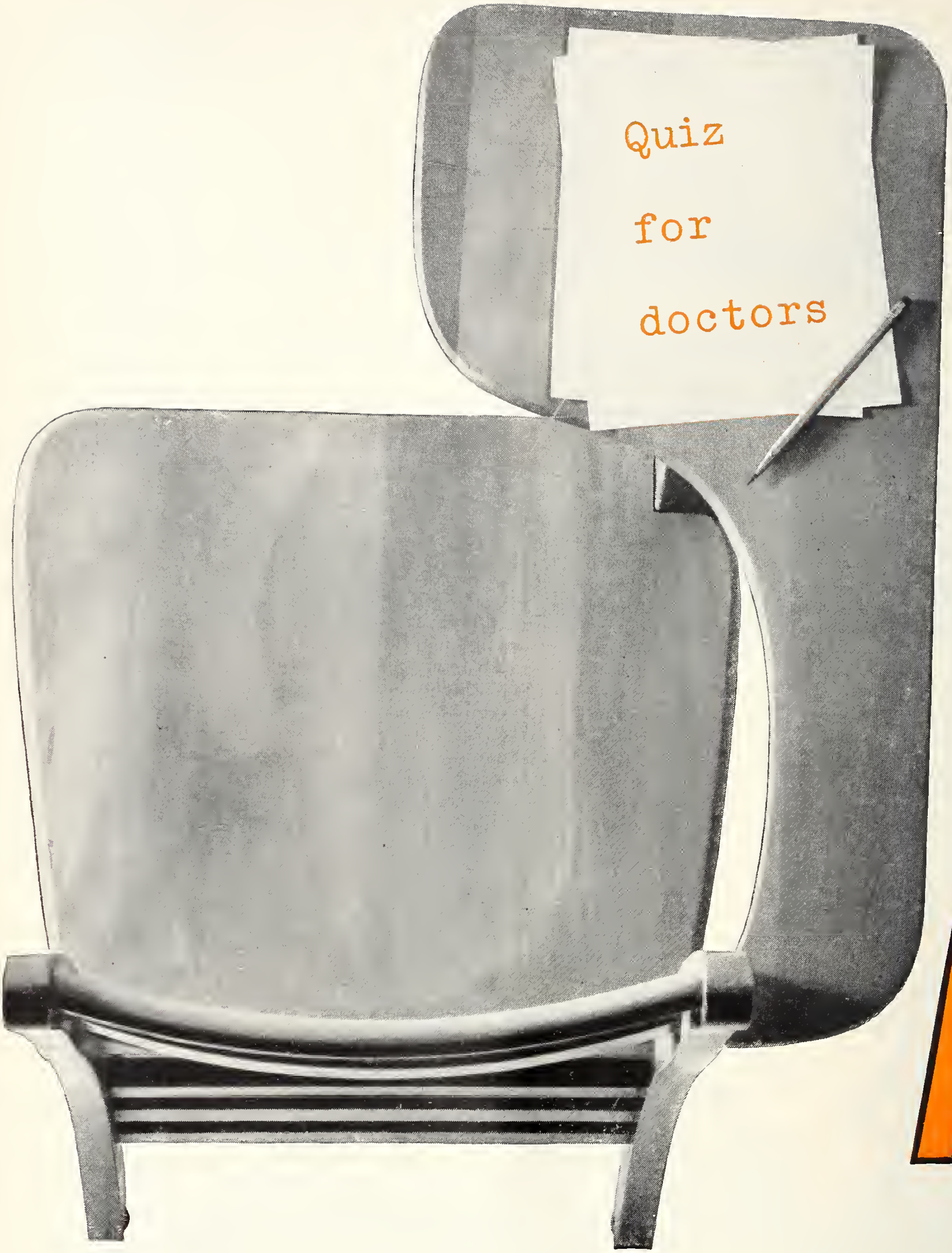
Wine is also notable for other desirable vasodilating, diuretic, and relaxant properties, and helps to allay restlessness and irritability in the sick and elderly.

A little Port or Sherry at bedtime affords a valuable aid to normal sleep and may obviate the need for sedative medication.

Recent results of laboratory and clinical research on the medical attributes of wine have been condensed into a small brochure entitled "Uses of Wine in Medical Practice." A copy is available to you—at no expense—by writing to: Wine Advisory Board, 717 Market Street, San Francisco 3, California.


Quiz
for
doctors

A

(you probably know every answer!)

Q. Which is today's most widely prescribed broad-spectrum antibiotic?

A. ACHROMYCIN — it's first by many thousands of prescriptions.

Q. What are some of the advantages of ACHROMYCIN?

A. Wide spectrum of effectiveness.
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Negligible side effects.

Q. Exactly how broad is the spectrum of ACHROMYCIN?

A. It has proved effective against a wide variety of infections, caused by Gram-positive and Gram-negative bacteria, rickettsia, and certain viruses and protozoa.

Q. In what way are ACHROMYCIN Capsules advantageous?

A. For rapid and complete absorption they are dry-filled, sealed capsules (a Lederle exclusive!) No oils, no paste...tamperproof.

Q. Who makes ACHROMYCIN?

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Case Report

Calcified Fibroma of Tunica Vaginalis Testis

E. HUMBER BURFORD, M.D., AND CYRUS E. BURFORD, M.D., *St. Louis*

THIS CONDITION deserves more than passing interest because of its probability of being mistaken for neoplasm of the testicle and its often too hasty complete extirpation along with the normal testicle itself. Early accurate description of it in the literature is lacking except for that of an Englishman named Astley Cooper in 1830. The entire subject remained dormant for almost a century when Hinman and Gibson, in 1924, initiated the wave of current interest in it. Since then cases have been reported with increasing frequency. Rubaschow (1926), Stricker and Franck (1927), Oehlecker (1930), Nora (1933), Thompson (1936), Hinman (1937), Ball (1941), Shulte (1942), Kretschmer (1946), Goodwin and Vermooten (1946), Crane (1954), in reporting true cases aggregate a total of approximately fifty-six instances, showing the rarity of the condition.

The reports of the latter two authors are so complete in their description and summary of the condition that little is left to be added. This case is being reported to keep this subject alive, to increase its importance in the differential diagnosis of neoplasms of the testicle and, possibly, to help shed more light on the etiology and pathogenesis of this growth.

CASE REPORT

L. S., a 79 year old white male, was seen in a stuperous condition. He had been quite active and mentally alert six months prior to onset of present illness although for the last year he had been "failing" mentally. For the last six months he spent most of each day in apparent sleep, arousing only for meals. In this weakened condition, he had fallen to the floor on several occasions when he attempted to get out of bed unassisted. With his last fall, he failed to become responsive and gradually lapsed into a stupor, in which condition he was admitted to the hospital.

His past history revealed that more than ten years previously he had had a thyroidectomy, following

---

From the Department of Surgery, Section of Urology, St. Louis University School of Medicine, St. Louis, Missouri.

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Indications: *Rheumatoid arthritis*
Bronchial asthma
Inflammatory skin conditions

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which he developed a neoplasm at the left angle of the scar. Some ten years ago this cancer was apparently successfully treated by radon seed implantation and deep x-ray therapy. The present scrotal enlargement was simply an incidental finding on his admission to the hospital.

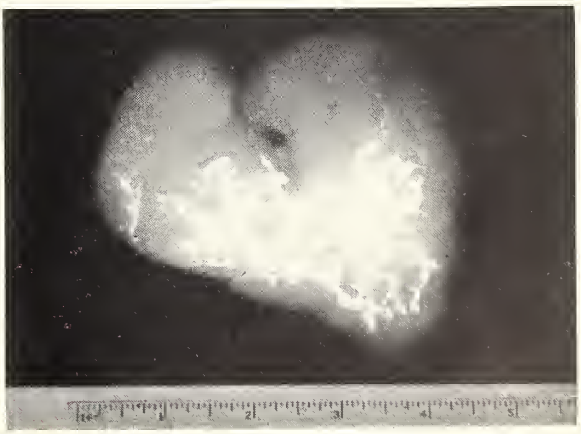
There were no urinary complaints. Prostate was small, symmetrical, not firm, irregular or tender. Urinalysis, serology and spinal fluid were normal or within normal limits. Nonprotein nitrogen was 33.7 mg. per 100 cc. blood. He had a filiform urethral stricture which responded readily to dilatation and only 30 cc. of residual urine. External genitalia was normal for age except for a large heavy, hard, nontender, nodular mass approximately six to eight times the size of the normal testicle in right scrotum. The mass was not connected with the testicle or cord and did not extend up to the external inguinal ring. It was freely movable, not hot or painful and no skin fixation or transillumination of light were demonstrated. No inguinal lymphadenopathy was palpated and chest x-ray was negative for any evidence of metastases. The left side of the scrotum was normal.

At operation the right scrotum was opened and a large firm mass was delivered into the wound. Dissection revealed normal testis, epididymus and cord. The mass was not attached to the testicle or cord but had several fibrous connections to the tunica vaginalis. As these connections were not dense, the mass was readily freed and removed.

The patient made an uneventful recovery both from the temporary stupor and from his scrotal surgery. He was discharged from the hospital ambulatory.

Pathological examination was as follows: "Received a tumor having the following dimensions: 115 by 75 by 40 mm. It appears to be encapsulated. It consists of grayish tissue and bone-like material which occupies the central portion of the mass. Section shows that the soft tissue consists of fibrous connective tissue. Most of it shows hyaline degeneration. It contains small areas of fat. Section of bone-like tissue shows calcium deposits. Diagnosis: Calcified fibroma."

In conclusion, additional diagnostic aids in this



X-ray of specimen reveals calcium deposits.

50 *and eight years*

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condition may be lack of skin fixation and x-ray film showing considerable calcium deposition, usually about the center of the tumor. Although the accepted therapy is surgical excision, one must be constantly aware of the possibility of this benign entity in which surgery of the testicle should be spared.

958 Arcade Bldg.

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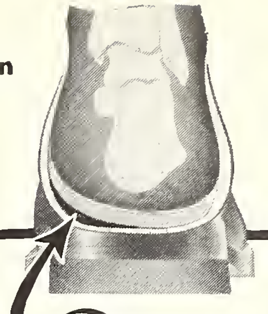
Foot-so-Port Shoe Construction and its Relation to Weight Distribution



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JAMES J. O'NEIL, M.D., Director of Clinics
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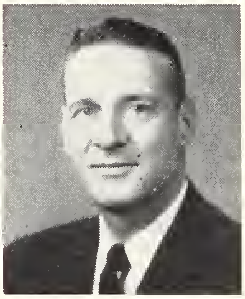
President's Page

When physicians get together informally, their talk often turns to investments. What's a good investment is a question that may provoke as many answers as there are doctors. To name just a few types of physician-investors, there are the "blue chip" advocates, there are the ones who hold that a little risk justifies the possibility of more than a little gain, and there are those to whom a little oil and uranium, if taken in moderation, look good.



I want to talk here about something that represents a particularly good investment at a time when our medical schools are struggling to keep solvent and free.

The American Medical Education Foundation was organized in 1950 by the medical profession, under the sponsorship of the American Medical Association, to raise unrestricted funds to aid medical education. By the end of last year, contributions had reached a figure just a little less than $4,000,000.

The AMEF points out that among the problems facing our medical schools are these: Endowment income is off. There is difficulty, not only in enlisting capable new teachers, but in retaining present faculty members in the face of more attractive remuneration from business, government and private practice. New teaching technics and rapid advances in medical science make the training of doctors more expensive than ever before.

The medical schools that train good doctors are among our country's most important national resources. A contribution to them is one of the best investments that could be made.

You will soon be receiving a letter from James P. Murphy, M.D., chairman of the Missouri State Medical Association's Committee for the American Medical Education Foundation. Along with it there will be a contribution and pledge card. I believe good investors will make good use of it.

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EDITORIALS

Cancer Detection

The Association has long been interested in cancer as a general health problem. Evidence of our interest is the fact that the Association established one of the first Cancer Committees in the midwest.

For many years members of the Committee on Cancer and individual physicians have recognized the importance of early detection in the control of this major health problem which will affect the lives of one in every four Missouri citizens if the present rate of incidence continues.

The phrase, "every doctor's office—a cancer detection center," is no longer an unrealistic ideal. It is an objective which can be accomplished if every doctor will cooperate to the full extent of his ability. Because of the public education program of the American Cancer Society, the general public is in an attitude of "readiness' to control cancer more than ever before. Many more people are going to their family physicians to seek periodic health examinations; and it is our responsibility to give them what they come for.

The Committee on Cancer is now presenting a plan which can accelerate the statewide program of early detection. The plan is a simple one involving the use of a single sheet to be used by both the patient and his physician. The "symptom survey" side of the form is to be filled out by the patient before he presents himself to the doctor's office for examination. The "physical examination" side of the form will furnish an outline suggesting the important points to be considered in an office examination. This outline has been prepared by the Committee on Cancer after careful study of the methods of cancer detection which have proved most successful in many leading medical centers of the country.

In the near future, all Association members will receive a sample of the form along with other information regarding this plan. It is hoped physicians will discuss this matter in county societies and agree to give full support to what is hoped will be a renewal of interest in the detection of early cancer in family physicians' offices.

Joseph L. Fisher, M.D., *Chairman,*
Committee on Cancer

Living the Life of Riley

"Young Man in White." This is the caption of an article in the August issue of *Reader's Digest* written by an able writer, Quentin Reynolds. It depicts one day, seventeen hours, in the life of a surgical intern.

Our young man in white is a junior intern in surgery, 28 years of age, a university graduate and late of the United States Navy. With this educational background and at an age when most ambitious men are well on the road to success and financial security, our man of the hour earns $25 a month. He has an additional two years of internship to complete at a maximum salary of $130 a month, which he will receive in his final year.

He estimates his medical education so far has cost his father $12,500. He is still not self-supporting and will not be even at the age of 30 when he completes his internship. Quentin Reynolds should be congratulated on the well written true depiction of the life of an intern, even if only for a day.

Let's carry this life a little farther and look into the future of our young man in white. After completion of his surgical internship will he be living the life of Riley? He must borrow money to equip an office. He must stretch his working hours at times to twenty-four a day. No forty hour week for him. He is allowed no depreciation of his educational expenses on his future earnings. Yet industry is allowed to depreciate worn out machinery. He pays but receives no benefits under the social security set-up. His twenty-four hour working days will eventually boost his earnings. This will place him in a higher income tax bracket and Uncle Sam will receive the benefits of his extra hours of labor. Possibly, at the age of 35, he will see his way clear to marry and support a family. It will be clear sailing now unless Uncle Sam calls him back into the Navy to complete his schedule under the peace time doctor draft law.

It all happened because he wanted to be a doctor. Even so, he's contented because he loves his work and his profession—and after 45 he can look forward to a brighter future.

Martyn Schattyn, M.D.

M.D.
MD
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ON THE RECORD

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Members in the News

The Rotary Club of Columbia had as its guest speaker on August 4 **Robert L. Jackson**, M.D., Columbia.

The *Caruthersville Argus* of July 29 carried a feature article on **George Wilson Phipps**, M.D., Caruthersville, giving the story of his life and his fifty-six years of practice, fifty-three of them in the same office.

The National Association of Coroners at a three day conference in August elected **Hugh H. Owens**, M.D., Kansas City, as president. Speakers at the meeting, which was held in Kansas City, included **Ralph E. Duncan**, M.D., and **Carroll P. Hungate**, M.D., Kansas City.

Officers and members of the Omaha Mid-West Clinical Society have invited Missouri physicians to attend the twenty-third annual clinical Assembly to be held at Hotel Paxton, Omaha, on October 24 and 27.

The Missouri Association for Retarded Children, at a two day session in Kansas City recently, reelected **C. G. Leitch**, M.D., Kansas City, as president.

Speaking before the National Association of Coroners' meeting in Kansas City in August, **Jacob Kulowski**, M.D., St. Joseph, discussed "Clinical Implications of Motorist Deaths."

For an extended visit in New Mexico, **A. F. Bugg**, M.D., Ellington, and his daughter are staying at a ranch adjacent to the location of the first atomic bomb explosion. The people with whom they are staying formerly also owned the present experimental atomic bomb site and lived in the house in which the first bomb was put together.

A visitor at the Boonville Chamber of Commerce at the recent meeting was **L. M. Garner**, M.D., Jefferson City. Dr. Garner was also one of the judges in a baby contest of Cooper County.

One of the speakers at a workshop for medical record librarians held at the University of Missouri September 22 and 23 was **Richard E. Johnson**, M.D., Columbia, who spoke on "The Use of the Medical Record in Research."

Among speakers at the forty second annual conference of the Mississippi Valley Conference on Tuberculosis and Mississippi Valley Trudeau Society, to be held at the Savery Hotel, Des Moines, Iowa, on October 13, 14 and 15, will be **Lawrence E. Wood**, M.D., Kansas City. He will speak on "Value of Tuberculin Testing as a Case Finding Method."

Guest speakers at the thirty-third annual Fall Clinical Conference of the Kansas City Southwest Clinical Society will be O. T. Clagett, M.D., Rochester; A. Carlton Ernstene, M.D., Cleveland; Frederick W. Fits, M.D., Chicago; John H. Gilmore, M.D., Chicago; James H. Growdon, M.D., Little Rock; Elmer Hess, M.D., Erie, Pa.; Edwin F. Hirsch, M.D., Chicago; William S. Middleton, M.D., Washington, D. C.; Rudolf J. Noer, M.D., Louisville; Eugene P. Pendergrass, M.D., Philadelphia; Edward H. Rynearson, M.D., Rochester; Theodore E. Sanders, M.D., St. Louis; Harris B. Shumacker, Jr., M.D., Indianapolis; Newton D. Smith, M.D., Fort Worth; J. Robert Willson, M.D., Philadelphia; Stewart Wolf, M.D., Oklahoma City.

DEATHS

Bragdon, George H., M.D., Reeds, a graduate of the Gate City Medical College, Dallas, 1904; honor member of the Jasper County Medical Society; aged 80; died July 5.

Speidel, Frederick W., M.D., Senath, a graduate of the University of Louisville School of Medicine, 1892; honor member of the Dunklin County Medical Society; aged 87; died July 29.

Draney, Thomas L., M.D., Kansas City, a graduate of Creighton University School of Medicine, Omaha, 1917; member of the Jackson County Medical Society; aged 64; died August 11.

Kennedy, R. W., M.D., Marshall, a graduate of the University of Louisville School of Medicine, 1920; member of the Saline County Medical Society; former Councilor of the Missouri State Medical Association; aged 62; died August 14.

Phelan, Emma, M.D., Kimmswick, a graduate of Barnes Medical College, 1909; honor member of the St. Louis Medical Society; aged 79; died August 21.

Eliscu, Frederick, M.D., St. Joseph, a graduate of Northwestern University Medical School, 1893; honor member of the Buchanan County Medical Society; aged 87; died August 24.

NEW MEMBERS

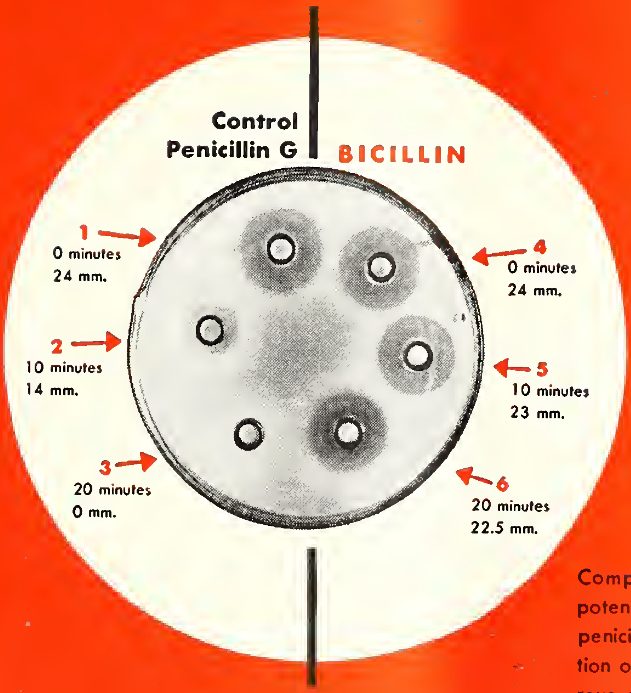
Brown, D. J., M.D., Boonville. Cooper County.
Davis, Sam, M.D., Dexter. Semo County.

BOOK REVIEW

The Permanent Revolution in Science, by Richard L. Schanck, Chairman, Department of Sociology, Bethany College Lecturer, Carnegie Institute of Technology. Philosophical Library, New York. 1954. Price $3.00.

This 107 page booklet discusses everything from nuclear theory to psychoanalysis. It furnishes one with a quick between train parboiled résumé of the philosophy of physics, physiology, psychology and every other branch of natural as well as unnatural science. Here one will find dozens of terms which will be at inestimable value at cocktail parties or in survey or "foundation" courses in modern science.

The reviewer is tempted to offer a small cash prize for the most lucid interpretation, in not over 500 words, of numerous such sentences as the following, starting at the bottom of page 20: "If we have overcome . . . but the group. . . ." L. G.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1. American Medical Association: New and Nonofficial Remedies. J. B. Lippincott Co., Philadelphia, 1954, p. 147.

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Missouri Medical Meetings

Kansas City Southwest Clinical Society, Annual Meeting, Municipal Auditorium, Kansas City, Oct. 3-6, 1955.
Second Annual Southeast Missouri Cancer Conference, Cape Girardeau, Oct. 6, 1955.
Clay County Medical Society Annual Clinical Conference, Elms Hotel, Excelsior Springs, Nov. 3, 1955.
Missouri Academy of General Practice, Annual Meeting, Governor Hotel, Jefferson City, Oct. 26-27, 1955.
Missouri Heart Association Postgraduate Course, Camdenton, Nov. 10-11, 1955.
American Public Health Association, Annual Meeting, Municipal Auditorium, Kansas City, Nov. 14-18.
Missouri State Medical Association, St. Louis, April 8-11, 1956.
St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.
Barton-Dade County Medical Society—third Wednesday of each month.
Benton County Medical Society—meets only on call.
Boone County Medical Society—first Tuesday of each month.
Buchanan County Medical Society—first Wednesday of each month.
Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.
Callaway County Medical Society—third Thursday of each month.
Cape Girardeau County Medical Society—first Monday of each month.
Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.
Clay County Medical Society—last Tuesday of each month.
Clinton County Medical Society—meets only on call.
Cole County Medical Society—first Monday of each month.
Cooper County Medical Society—first Monday after the 15th of each month.
Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.
Dunklin County Medical Society—first Tuesday of each month.
Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.
Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.
Greene County Medical Society—fourth Friday of each month.
Henry County Medical Society—meets only on call.
Holt County Medical Society—meets only on call.
Howard County Medical Society—meets only on call.
Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.
Jasper County Medical Society—second Tuesday of each month, September through May.
Jefferson County Medical Society—meets only on call.
Johnson County Medical Society—meets only on call.
Laclede County Medical Society—second Monday of each month at 6:00 p.m., at the Louise Wallace Hospital, Lebanon.
Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.
Lewis-Clark-Scotland County Medical Society—meets only on call.
Lincoln-St. Charles County Medical Society—third Thursday of each month.
Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p.m.
Miller County Medical Society—meets only on call.
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.
Moniteau County Medical Society—second Thursday of each month.
Newton County Medical Society—meets only on call.
Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.
North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.
Pemiscot County Medical Society—third Thursday of each month.
Perry County Medical Society—second Thursday of each month.
Pettis County Medical Society—third Monday each month September through May.
Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.
Pike County Medical Society—third Tuesday of each month.
Platte County Medical Society—meets only on call.
St. Louis County Medical Society—second and fourth Wednesday of each month.
St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.
Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.
South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.
Vernon-Cedar County Medical Society—meets only on call.
Webster County Medical Society—meets only on call.
West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

The 500,000 attendance mark was reached and passed at the 1955 Missouri State Fair held in Sedalia, August 20 to 28. The weather was dry and "hot enough" throughout. There was a noted contrast between the large displays of farm products this year as against the paucity of the same at last year's fair.

Two new special exhibits attracted a great deal of attention this year. One was the Missouri Railroads

The Organs of the human body

The photographer could not obtain a picture of the exhibit without people about.

The exhibit was constantly well attended.

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And still her night keeps
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rest . . . no sleep . . . no rest.
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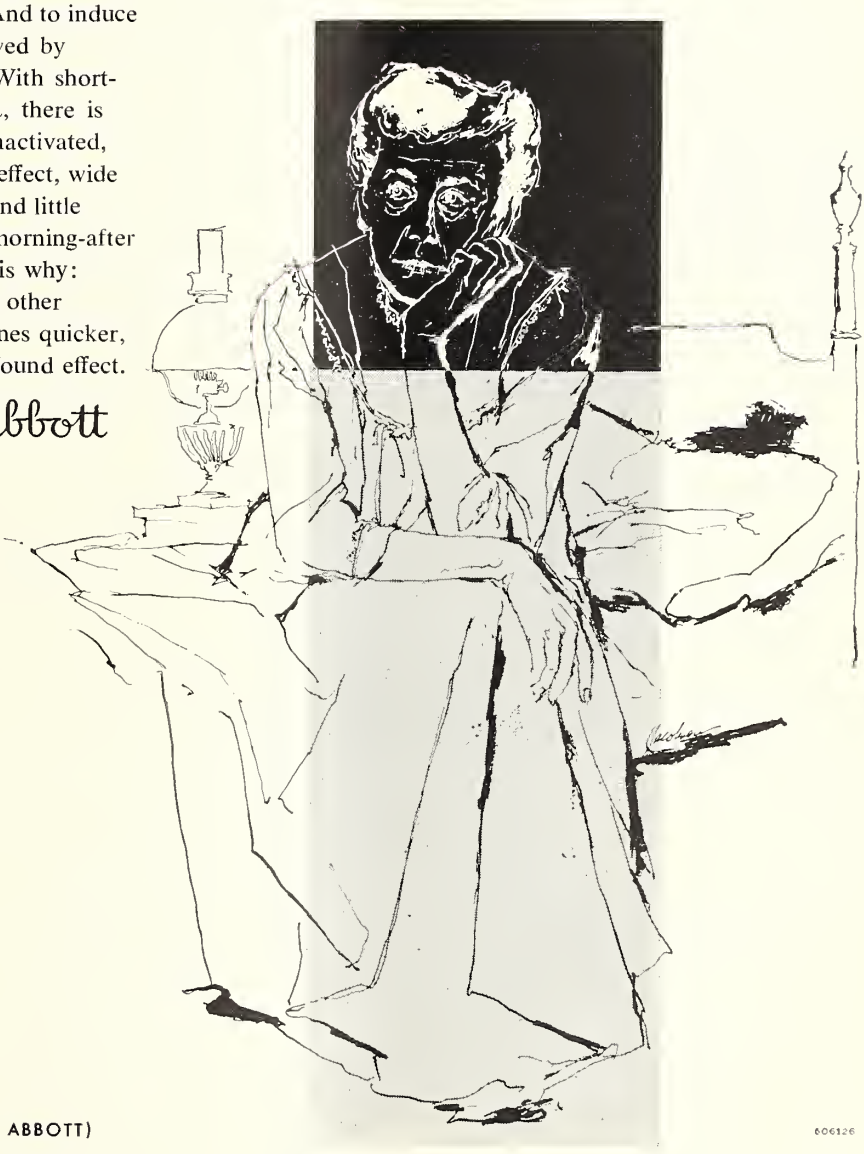

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Some tarried at the exhibit, but the group changed with time.

display showing some of their latest equipment in both freight and passenger categories, and the other brought forth a number of old steam engine threshing machine ensembles.

After adding to all of this, the grand circuit harness races, automobile races, judging contests for animals, and babies as well, a full fledged carnival, plenty of foot long hot dogs with ice cold soda, some politics on the side with former President Truman speaking at the Annual Missouri Country Ham Breakfast, the usual run of exhibits and a cosmopolitan crowd of people, unclassified as to size, shape and interest, one has the 1955 Missouri State Fair, fairly well catalogued.

That is with the exception of visualizing the awe and concern displayed by hundreds of unsuspecting folks who visited the display presented by the Committee on Health and Public Instruction of the Missouri State Medical Association. Here was shown an

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Frank B. Norbury, M.D.
Associate Physician

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educational exhibit entitled "You and Your Body." This is an interesting display showing in true-to-life manikins, the location, size and appearance in three-dimensional form all of the organs of the human body exclusive of the extremities. Two life-size manikins are used to show where such organs as the lungs, the heart, the diaphragm, stomach, intestines and other organs are located. Visitors to the exhibit were able to obtain additional information on each of the organs by pressing a button which explain the purpose, function and nature of sixteen of the body's organs—it seems that most people like to punch things—and maybe learn things.

It was both entertaining and revealing to hear many of those, viewing the exhibit exclaim, "Why I thought my gallbladder was on the other side." We are indebted to the Bureau of Exhibits of the American Medical Association for the loan of this effective, educational display.

The exhibit appeared to prove that people are interested in anything connected with health.

Many took pamphlets for additional information.

The large number of visitors to our booth also made it possible to distribute a satisfactory quantity of various health materials—we hope some of it will be read.

The Pettis County Medical Society, as another of its many free public service projects, manned the first aid station hospital on the fair grounds around the clock during the nine day fair. Members of the Society were scheduled on four hour shifts. Plenty of blisters, headaches, cuts and other nondescript ailments were the order of the day.

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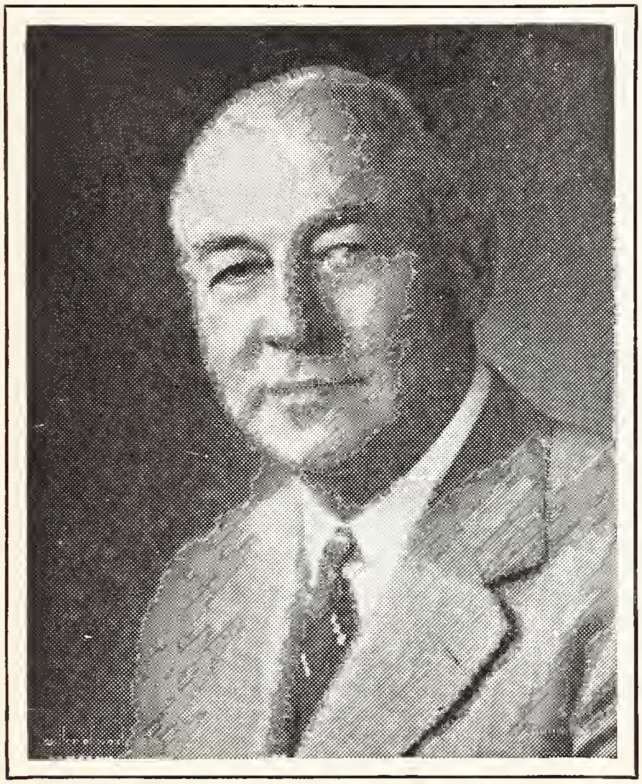
AN IMPORTANT MESSAGE FROM THE SECRETARY OF THE TREASURY

A THREE-WAY PARTNERSHIP THAT BENEFITS EVERYBODY

How the public, the magazine publishers and the U. S. Government cooperate to help keep the nation's economy growing always stronger

As a reader of this magazine, the chances are that you belong to a "three-way partnership" dedicated to intelligent saving and a sound economy. For you probably buy United States Savings Bonds. Nearly 40 per cent of the families in America own them. Most Bond-owning families have saved enough in this way to pay for a serious illness, to provide something for old age, to make a down payment on a house or take a long trip. And perhaps most important, these families have the wonderful feeling of security that the ownership and holding of these Bonds bring.



Americans today are buying Savings Bonds at annual rate of more than $5,000,000,000. In the time takes you to read this page, approximately one minu America will buy $10,000 worth of Series E and Bonds!

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It came about through a great program of volunta cooperation with the Treasury Department on the p of many groups, organizations and citizens. The mag zine publishers have from the beginning been amo the major supporters of the Bond program. They c tribute millions of dollars' worth of advertising spa each year.

Full credit for making Bond-buying a national ha is due that "three-way partnership"—the American ci zen, the Government, and the volunteer groups, such the magazine publishers, who bring buyer and seller gether through the pages of their publications.

All three partners will profit further by continui to help increase the nation's saving through the sale Savings Bonds.

For so effectively promoting the national welfar wish, on behalf of the Government, to extend to t magazine publishers our most sincere thanks.

G M Humphrey

Secretary of the Treasury

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Dowling, H. F.: Practitioner 174:611 (May) 1955.

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News From the Medical Schools

UNIVERSITY OF MISSOURI SCHOOL OF MEDICINE

APPOINTMENTS, PROMOTIONS AND RESIGNATIONS

Dr. Frank B. Engley, Jr., assumed his duties as Professor and Chairman of the Department of Microbiology on August 15. Dr. Engley comes to Missouri from the University of Texas Medical Branch of Galveston, where he was associate professor of bacteriology and consulting bacteriologist to University of Texas Hospitals. Dr. Engley, a native of Wallingford, Connecticut, received his Bachelor of Science degree from the University of Connecticut in 1941. He did graduate work at the University of Pennsylvania, receiving his Master of Science degree in 1944. After serving two years with the U. S. Army, he entered the graduate school of the U. S. Department of Agriculture in 1946 and in 1947 became a special student in Johns Hopkins University School of Hygiene and Public Health. He obtained his Ph.D. degree from the University of Pennsylvania in 1949 and returned to work with the Army Chemical Corps at Camp Detrick, Maryland. Mrs. Engley is also a professional microbiologist and has served on the research staff of the Army Chemical Corps at Camp Detrick. She has continued her interest in her profession, having recently worked at the University of Texas Medical Branch. The couple has three children.

There have been several promotions on the faculty of the School of Medicine in recent months. In anatomy, Dr. Edward W. Lowrance, former Associate Professor, becomes Professor. In Medicine, Dr. John H. Killough has been promoted from Assistant Professor to Associate Professor. In Physiology and Pharmacology, Associate Professors Wesley S. Platner and Dallas K. Meyer have been promoted to full professorships. Mr. Charles C. Colby now holds the academic rank of Assistant Professor of Medical Bibliography as well as being Assistant Librarian in charge of the Medical Library.

Dr. E. D. Bueker has resigned as Associate Professor of Anatomy to become Associate Professor of Anatomy at New York University. While at Missouri, Dr. Bueker received several grants from the U. S. Public Health Service and made important contributions on the effect of cancerous tissue on embryonic nerve growth.

CONSTRUCTION REPORT

Although there is no end to the work involved in planning a medical school and hospital, it sometimes seems that the actual construction is even more time consuming. But bricks get laid on bricks and tile on tile, and one day the thing begins to look like it may be completed. Construction on the new hospital is really well along, and the outpatient division and the first two or three floors are beginning to look like a hospital should look, instead of being just a confusion of partially completed partitions, webs of wires, and a potpourri of pipes. Much of the heavy equipment is now being installed and the receiving warehouses are already beginning to bulge with the thousands of items necessary to put a hospital into operation.

The new medical school has taken its place on the Columbia skyline, now that all of its floors are in place. And the new nurses' dormitory will have also assumed its position with the completion of the fifth floor and roof by the time this goes to press.

When will we be in the new hospital? The answer is of course, "When it is finished." No exact date can be set because there are too many imponderables, but it will not be too long now. The new medical school building will be available in a few months, supposedly in plenty of time to complete the move to it by the beginning of the school year. The nurses' dormitory was started much later than the others but it is basically much easier to construct, and will probably be completed at a rate which will surprise all. The University of Missouri Medical Center has now actually taken shape!

PAPERS, BOOKS, GIFTS AND GRANTS

The last two years have seen one hundred publications in the scientific literature emanating from the School of Medicine at the University of Missouri. Included in these are three books which are believed to be the first medical textbooks to bear the colophon of the University of Missouri School of Medicine. They are "Pulmonary Diseases" by Dr. Roscoe L. Pullen, published January, 1955, by Lea and Febiger; "Pathologic Physiology—Mechanism of Disease," 2nd Edition, by Dr. William A. Sodeman, published by W. B. Saunders & Company, to be ready in 1955; and "Cardiac Arrest and Resuscitation" by Dr. Hugh E. Stephenson, Jr., published by the C. V. Mosby Company, to be released in 1955.

During the last two years the School of Medicine has received a total of more than a quarter million dollars in gifts, grants and contributions. And in addition to these, there have been numerous other gifts and bequests, though the tangible value has not yet been ascertained.

TRIPS AND TALKS

Dr. Walter J. Burdette, Professor and Chairman, Department of Surgery, has recently returned from Tübingen, Germany, where he engaged in investigative work in the laboratories of Professor Butenandt at the Max-Planck-Institut für Biochemie. While abroad he gave lectures at both the Universities of Heidelberg and Tübingen.

Dr. W. A. Sodeman, Professor and Chairman, Department of Medicine, spoke in Columbia on June 22 to a meeting of the welfare directors of Missouri, sponsored by the University School of Social Work.

WASHINGTON UNIVERSITY MEDICAL SCHOOL

Dr. Herman N. Eisen, associate professor of industrial medicine at New York University Postgraduate Medical School, has been named head of the new dermatology division at Washington University School of Medicine. Dr. Eisen will assume his new duties October 1, setting up a dermatology division under a $400,000 Rockefeller Foundation grant announced last December. The division will be the first of its kind in a privately endowed university and will offer a program of research and training in disorders of the skin. The new division will be located in the Barnard Free Skin and Cancer Hospital in Washington University Medical Center. A graduate of New

York University Medical College in 1943, Dr. Eisen has taught at Columbia University College of Physicians and Surgeons, the New York College of Medicine and, since 1949, at the New York University Postgraduate Medical School.

Dr. J. Albert Key, noted orthopedic surgeon and professor emeritus of clinical orthopedic surgery, died August 6 after suffering a heart attack at his country home at Wesco, Mo., near Steelville. Dr. Key also was chief of orthopedic surgery at Barnes and affiliated hospitals and a former president of the American Academy of Orthopedic Surgeons. He was an original member of the Robert Jones Club, an organization of orthopedic surgeons formed after World War I. A medical graduate of Johns Hopkins University in 1918, Dr. Key spent several years in training at hospitals in Boston before establishing himself in St. Louis in 1924.

The Sixteenth Congress of the International Society of Surgery was held July 24-31 in Copenhagen, Denmark. Dr. Evarts A. Graham, Bixby professor emeritus of surgery and president of the Sixteenth Congress of the Society, delivered an address on "The Changing Character of Surgery and the Implications of Those Changes for This Society." Dr. Robert Elman, professor of clinical surgery, also attended. This Sixteenth Congress marks the 53rd year of the International Society of Surgery.

Dr. Oliver H. Lowry, professor of pharmacology and head of the department at Washington University School of Medicine, has received a $26,050 research grant from the National Science Foundation. The grant, one of 161 awards for basic research in the natural sciences and other scientific studies, will be used for a three year study of riboflavin enzymes.

An open house was held at the new Renard Hospital, psychiatric unit of Washington University-Barnes Medical Center, on August 27. Members of the Renard family, their friends and business associates were invited by the Corporation of Washington University, the Board of Trustees of the Barnes Hospital and the faculty of the School of Medicine to inspect the hospital before it was occupied by patients. Funds for the construction of the hospital were contributed by the late Mr. and Mrs. Wallace Renard and matched by the Hill-Burton Act. An open house for the public was held August 29. Members of the neuropsychiatric staff of the medical school and Mr. Joseph T. Greco, associate director of Barnes Hospital, guided persons through the hospital. The $1,580,000 hospital, begun in 1952, is a one hundred bed addition to the medical center. It is located at 4940 Audubon avenue, about 500 feet east of Kingshighway boulevard, immediately west of the Washington University Clinic Building. Formal dedication ceremonies for the hospital and a one and one half day scientific program will be held October 10 and 11.

Dr. Phillip H. Starr, director of the Community Child Guidance Clinic of Washington University, was invited to participate in the Denver summer meeting for the Advancement of Orthodontic Practice and Research held August 1-5. As guest lecturer, Dr. Starr delivered two papers: "Psychological Aspects of Thumbsucking as It Relates to Dental Malocclu-

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sion," and "Some Perspectives of Child Psychiatry and Their Application to Orthodontic Practice."

SAINT LOUIS UNIVERSITY SCHOOL OF MEDICINE

Seventy-eight promotions in academic rank at the Saint Louis University School of Medicine became effective September 1. The faculty members, listed by their new ranks are as follows: Clinical Professor, Dr. Robert M. O'Brien, orthopedic surgery. Associate Professors, Dr. Edward A. Doisy, Jr., internal medicine; Dr. Ralph A. Kinsella, Jr., internal medicine; Dr. William A. Knight, Jr., internal medicine. Associate Professor (Clinical), Dr. Daniel L. Sexton, internal medicine; Dr. Vincent L. Jones, ophthalmology; Dr. Robert D. Mattis, ophthalmology; Dr. Leo V. Mulligan, surgery. Assistant Professors, Dr. John E. Allison, anatomy; Dr. John F. Schmedtje, anatomy; Dr. Hollis N. Allen, pathology. Assistant Professors (Clinical), Dr. Roy V. Boedeker, gynecology and obstetrics; Dr. Edward D. Kinsella, Dr. John A. Neutzel, Dr. Robert Potashnick, Dr. Walter A. Younge, Internal Medicine; Dr. Eutemio D. Tenaglia, ophthalmology; Dr. Francis J. Burns, Dr. Joseph L. Lucido, Dr. Francis X. Paletta, Dr. Harry K. Purcell, Dr. Gene B. Starkloff, surgery; Dr. Maurice B. Roche, orthopedic surgery. Senior Instructors, Dr. Malcolm B. Bawell, Dr. Paul J. Bettonville, Dr. Donald W. Bussmann, Dr. Edward W. Czebrinski, Dr. Martin W. Davis, Dr. David Feldman, Dr. Max S. Franklin, Dr. Harold Freedman, Dr. Victor K. Hager, Dr. David A. Hoffman, Dr. John J. Inkley, Dr. R. Emmet Kelly, Dr. Gerald J. F. Mudd, Dr. William F. Kistner, Dr. Lawrence M. Kotner, Dr. George A. Mahe, Dr. Charles Silverberg, Dr. Jack Zuckner, internal medicine; Dr. Michael F. Pernoud, Dr. Howard P. Venable, ophthalmology; Dr. Robert N. Tindall, otolaryngology; Dr. William L. Drake, Henry Halley, pathology; Dr. Bray O. Hawk, Dr. Francis E. Pennington, Dr. Charles S. Sherwin, surgery; Dr. William C. MacDonald, internal medicine; Dr. Kilian F. Fritsch, orthopedic surgery. Instructors, Dr. Scott R. Barrett, Dr. Clifford A. Hancock, gynecology and obstetrics; Dr. Archibald M. Ahern, Dr. Waldo W. Forsman, Dr. Arthur K. Friskel, Dr. Clement B. Grebel, Dr. John Johnstone, Jr., Dr. Bernard T. Koon, Dr. Robert A. Mayer, Dr. Wilburn C. Missey, Dr. Gerard A. Munsch, Dr. Gerard A. Nester, internal medicine; Dr. Philip Gale, Dr. Anna Hyman, neurology and psychiatry; Dr. Robert J. Rothweiler, otolaryngology; Dr. James L. Donahoe, Dr. Eugene H. Ebel, Dr. Francis X. Lieb, Dr. Austin R. Sharp, pediatrics; Dr. Sherwood P. Peartree, radiology; Dr. Lloyd S. Rolufs, Dr. Royal A. Weir, surgery; Dr. Donald A. Burst, orthopedic surgery; Richard Lee, John Pfaff, Eugene Tucker, pathology.

Dr. Edward A. Doisy, distinguished service professor of biochemistry and director of the department, has been named by the National Science Foundation to a special committee which will study medical research of the Department of Health, Education & Welfare. Survey will center on $100 million annual outlay of National Institutes of Health; research grant programs of PHS Bureau of State Services; Office of Vocational Rehabilitation and Children's Bureau.

Dr. C. Rollins Hanlon, professor of surgery and director of the department, delivered a paper before the Southwestern Surgical Congress in Kansas City, Missouri, September 5.

Dr. Erwin E. Nelson, professor of pharmacology and director of the department, and Dr. Leonard Procita, instructor in pharmacology, attended the Annual Meeting of the Society for Pharmacology and Experimental Therapeutics held at the University of Iowa Medical School, Iowa City, September 4 to 8.

Dr. Goronwy O. Broun, professor of internal medicine and director of the department, presented a paper titled "Diet in Liver Disease" before the Medical Society at St. Francis Hospital in Washington, Missouri, August 9.

Dr. Otakar Machek, instructor in orthopedic surgery, attended a postgraduate course in pediatric neurology at Cook County Postgraduate School in Chicago in July.

Dr. Ian D. Ferguson, associate professor of physiology, reported on studies of regional sweating in relation to body temperature during rising and steady ambient temperatures before the Seventh Autumn Meeting of the American Physiological Society held September 5 to 9 at Tuft's College, Medford, Mass.

The class of 1945 will celebrate its tenth reunion Thursday, September 29, during the meeting of the Mississippi Valley Medical Society meeting in Saint Louis. A cocktail party will be held in a hospitality room at the Chase Hotel on that day from 1:30 p.m. to 6:00 p.m. Graduates and their wives will attend a dinner dance at the Old Warson Country Club beginning at 7:30 p.m. Dr. Donald Burst, 16 Hampton Village Plaza, Saint Louis, is in charge of reservations.

MODERN TRENDS IN THERAPY SYMPOSIUM

A one day symposium on "Modern Trends in Therapy" will be presented by the St. Louis Academy of General Practice, Washington University School of Medicine, St. Louis University School of Medicine and the Lederle Laboratories at the Chase Hotel, October 9. Lederle Laboratories will be hosts for the presentation, which includes a luncheon for physicians and their wives and a cocktail hour and reception as well as the scientific program. There will be no registration fee and six hours of formal postgraduate credit will be given members of the American Academy of General Practice. The program follows:

9:00 a.m. Registration, Starlight Roof, Chase Hotel.

10:00 a.m. Treatment of Hypertension, W. S. Priest, M.D., Associate Professor of Medicine, Northwestern University School of Medicine, Chicago.

10:40 a.m. Office Gynecology, Emil Holmstrom, M.D., Professor and Department Head, Obstetrics and Gynecology, University of Utah College of Medicine, Salt Lake City.

11:20 a.m. Medical Management of the Elderly, Edward J. Steiglitz, M.D., Consultant in Geriatrics, Veterans Administration, Washington, D. C.

12:00 noon. Questions and panel discussion.

12:45 p.m. Luncheon for Doctors and their wives, Chase Club.

2:30 p.m. Management of Infectious Diseases, Perrin H. Long, M.D., Professor of Medicine, State University of New York, New York.

3:10 p.m. Newer Analgesics and Anesthetics, John Adriani, M.D., Director, Department of Anesthesia, Charity Hospital of Louisiana, New Orleans.

3:50 p.m. Coffee break.

4:05 p.m. Modern Concepts of Stress, Gunnar Heuser, M.D., Institute of Experimental Medicine and Surgery, University of Montreal, Montreal, Canada.

5:30 to 6:30 p.m. Cocktails and reception, Tiara Room, Park Plaza Hotel.

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Letters to Missouri Medicine

Seven Ozark Counties

Steelville, Mo.

To the Editor:

The Division of Health of Missouri kindly furnished me with some statistics from the records of seven selected counties in the southern part of the state; namely, Carter, Crawford, Dent, Oregon, Reynolds, Shannon and Washington. Please regard these figures as "samples," not rigidly scientific, but the modern trends are correctly illustrated. All these counties showed a loss in population (1950 census) from 7 to 29 per cent in ten years. Yet the number of births were fairly uniform. My figures cover four years, 1949 to 1952 inclusive. Births totaled 1,350 in this time —that is an average birthrate of 18 (not high).

Let me give the birth rates for 1952 for the counties: Carter, 20; Crawford, 21; Dent, 18; Oregon, 15; Reynolds, 17; Shannon, 19; Washington, 24. This readily demonstrates that the Ozark region is not as prolific as it was a few years ago. (In 1948 the birth rate was about 22.) Most of the counties show a decline in births in the four years; the state average for 1950 was 21.6 (1940, 21.7). The diminution in the total population is reflected by the lessened number of births.

An interesting comparison can be made from the birth rate and the death rate. (The State death rate for 1940 was 11.2 and 1950, 11.) In my selected group the death rate (1950 census) was only 10, or slightly less, in spite of the fact that old people like to live in their boyhood environment. It seems healthy, they live a little longer!

Another comparison is thought provoking, that is, the ratio of the births and deaths (I have referred to this in another letter). The State figures (1950) are— ratio 21.6 to 11—roughly 2 to 1. This ought to be our standard.

As a whole the seven selected counties (70,000 population) reveal statistics that are good. In the four years the births numbered 5,353, and the deaths 2,834: the ratio is therefore approximately 1.9 to 1. Good for the rural district! Admittedly, so many of these births took place in a hospital; that is also true of many deaths.

To the practitioner a comparison of the maternal death rate in the state and the selected counties should be instructive. In the state the total maternal death rate is recorded as .82 per thousand. This is a reduction from 1948 when a rate of 1 per thousand was recorded.

How do the seven counties stand? The four years yielded a maternal death rate of 1.1 per thousand and births (5,353 births with 6 deaths). Not bad for a rural practice!

The study of the still births and the neonatal deaths is not so favorable. Why are the number of still births so excessive in some counties? I do not know.

In a short paper published in the *Bulletin* of the St. Louis Medical Society, I proposed as a standard that the number of still births and neonatal deaths should be about the same and combined yield a death rate of less than thirty. I will discuss this subject more fully in another letter.

Here let me mention that the death rate (still born and neonatal) varies so much in rural practice. The maternal death rate has been greatly reduced, but this is not true of the still births and neonatal mortality.

Primarily, let us look at the records of three counties: Crawford, Dent, and Washington: Population 37,000, births 3,262, still births and neonatal deaths 195—that is a death rate from these conditions of 60 per thousand births (live births 3,262, deaths 195).

John Zahorsky, M.D.

Derivation From Greek

To the Editor:

In re: "Arrastogenic," page 634 of the August 1955 issue. The Greek word being (arrostos)* the new coined word should be "arrostogenic," and not "arrastogenic."

John Johnstone, Jr., M.D.

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* English translation.

SOUTHEAST MISSOURI CANCER CONFERENCE

The second annual Southeast Missouri Cancer Conference will be held October 6 at Memorial Hall, Southeast Missouri State College, Cape Girardeau, beginning at noon. The conference covers Southern Illinois, Western Kentucky, Northern Arkansas, Northwestern Tennessee and Southeast Missouri. The sponsors of the meeting are the Tenth Councilor District of the Missouri State Medical Association, the Missouri Division of the American Cancer Society, the American Academy of General Practice and the Cape Girardeau County Medical Society.

Guest speakers of the conference will be John King, M.D., National Associate Director, American Cancer Society; Richard D. Brasfield, M.D., neoplastic surgeon, Pack Medical Group, New York; William Remine, M.D., surgeon, Mayo Clinic, Rochester; Eugene M. Bricker, M.D., associate professor of surgery, Washington University, St. Louis; John T. Dillon, M.D., assistant radiotherapist, M. D. Anderson Hospital and Tumor Institute, Houston, and Malcolm B. Dockerty, pathologist, Mayo Clinic, Rochester. The program follows:

12:00 noon. Luncheon and introductions.

1:00 p.m. Clinical session with lectures by each of the guest speakers followed by discussion period. Subjects to be included are "Cancer of the Ovary," "Surgical Care of Advanced Pelvic Cancer," "Melanoma and Soft Tissue Sarcoma," and "Supervoltage Radiation Therapy."

5:30 p.m. Cocktail hour.

6:30 p.m. Banquet.

8:30 p.m. Evening clinic session and presentation of problem cases in cancer diagnosis and therapy from the files of the Southeast Missouri Tumor Clinic with discussion by guest speakers.

Reservations may be made and further information obtained by writing the Southeast Missouri Cancer Conference, D. R. Seabaugh, M.D., 219 N. Pacific, Cape Girardeau.

Tuberculosis Abstract

PROBLEM OF THE ASYMPTOMATIC PULMONARY LESION

A 67-year-old clothing salesman registered at the Mayo Clinic on November 11, 1953, for evaluation of an asymptomatic X-ray shadow in the field of the upper part of the left lung. The abnormal shadow had been discovered in June, 1949, in a routine roentgenologic survey. Follow-up roentgenograms were made in the next few months. Apparently little change occurred in the roentgenologic appearance of the lesion until August, 1951. In December, 1951, the patient had a short episode of substernal pressure-type pain, which was relieved by pills and an injection. No apparent change was noted in the electrocardiogram to indicate localized myocardial injury. On January 23, 1952, he entered his local tuberculosis sanatorium and began to receive antimicrobial therapy with streptomycin and para-aminosalicylic acid. Use of the para-aminosalicylic acid (PAS) was discontinued after four months, but the streptomycin was given for two more months. The roentgenologic appearance of the lesion showed little change during the six months of treatment, and the patient was dismissed for roentgenologic follow-up studies on an outpatient basis. The patient was not aware of any positive results of procedures for the detection of tubercle bacilli by smear, culture, or inoculation of guinea pigs with specimens of the sputum or with gastric washings. In September, 1953, he had noted slight fever and cough of a few days' duration, relieved by injections of penicillin.

In October, 1953, a follow-up roentgenogram of the thorax showed possible slight enlargement of the shadow under observation. Further investigation was recommended. There were no unusual symptoms at this time, however.

The patient was found to be an asthenic white man weighing 117 pounds, and 67 inches in height. The blood pressure was 140 systolic and 80 diastolic, in millimeters of mercury. The cardiac rhythm was regular and there were no significant murmurs. Other than slight diminution of breath sounds and occasional soft rales over the left posterolateral aspect of the thorax, the findings were not significant. Lymph nodes were not enlarged.

Urinalysis, determination of hemoglobin, leukocyte count, and determination of the blood urea gave results within normal limits. The sedimentation rate was 15 mm. in one hour by the Westergren method. Result of the Kline test was negative. A tuberculin test, in which 0.0001 mg. of purified protein derivative was used, was reported as giving a negative result. A second injection of 0.005 mg. of purified protein derivative was reported to have produced a positive reaction after forty-eight hours. An electrocardiogram showed only left axis deviation. Examination of the sputum, bronchial smears, and bronchial washings

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By the National Tuberculosis Association.
By R. Drew Miller, M.D., The Journal Lancet, March, 1955.

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for malignant cells and acid-fast bacilli gave negative results.

A roentgenogram of the thorax showed a rather extensive lesion on the left at the level of the first and second anterior interspaces. Tomograms of the area showed no definite cavitation. The serial roentgenograms of the thorax made in the patient's home town, when reviewed, showed very slight enlargement of the shadow over the two-and-one-half-year period. Bronchoscopy revealed no gross abnormalities.

Because of the indeterminate nature of the lesion after clinical study and observation, left thoracotomy was advised. A grade three adenocarcinoma of the posterior segment of the upper lobe of the left lung was found at operation, with no involvement of the hilar nodes. Left pneumonectomy was performed. The patient made an uneventful recovery.

Follow-up reports from the patient's local physician indicated that symptoms of cerebral metastasis appeared. The patient died on June 5, 1954. A large metastatic lesion of the right cerebral hemisphere was found at necropsy.

The value of survey roentgenograms, which is widely appreciated among the laity as well as within the medical profession, is again demonstrated in this case. The case further points out the difficulty so often encountered in making a clinical diagnosis after an asymptomatic lesion is discovered. The lesion located peripherally in the field of the upper part of the left lung had characteristics of either a chronic inflammatory process or a neoplasm. Although it was possible to detect the abnormality by means of the roentgenogram, this did not provide the etiologic diagnosis. Laminated calcium, diagnostic of a granulomatous process, was not evident in any of the serial thoracic roentgenograms of this patient. Even tomograms, made just before operation, did not demonstrate calcium. Thus, a malignant neoplasm could not be ruled out from a roentgenologic standpoint. The value and limitations of roentgenologic technics in the detection of asymptomatic lesions have been reviewed by Good and associates. Serial roentgenograms showed little change in the abnormal shadow. Although failure of such a shadow to change might suggest that the lesion thus depicted is benign, this case demonstrates how a bronchogenic carcinoma, particularly an adenocarcinoma, may show little change over a period of months or even years.

The failure of previous bacteriologic studies by home physicians to demonstrate tubercle bacilli in the patient's sputum or gastric washings cast doubt upon the clinical diagnosis of pulmonary tuberculosis. Furthermore, failure of the shadow to regress during combined chemotherapy should lead to further questioning of the previous clinical diagnosis. The skin tests indicated that the patient previously had been infected with tubercle bacilli and probably also Histoplasma capsulatum, but additional bacteriologic studies had failed to show that the pulmonary lesion was related etiologically to the cutaneous reactions. In this case a clinical diagnosis could not be made by the usual laboratory methods, and thoracotomy became necessary. The incidence of malignant lesions among asymptomatic circumscribed pulmonary lesions has been pointed out by Harrington.

The patient's ultimate clinical course illustrates the serious complications which often follow the discovery of bronchogenic carcinoma, even though the hilar nodes were not involved. Tinney and Moersch found

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symptoms referable to the nervous system in 12 per cent of 448 cases of carcinoma of the lung. In 4 per cent of the entire series, the neurologic symptoms represented the presenting complaint. King and Ford, in reviewing 100 cases of metastasis to the central nervous system from carcinoma of the lung, concluded that these types of metastasis occur early and frequently. This further demonstrates the importance of early diagnosis and treatment of asymptomatic lesions of the lung.

Book Reviews

EMERGENCY TREATMENT AND MANAGEMENT, by Thos. Flint, Jr., M.D., Director, Division of Industrial Relations, Permanente Medical Group, Oakland and Richmond, California; Chief, Emergency Department, Permanente Medical Group, Kaiser Foundation Hospital, Richmond, California. W. B. Saunders Company, Philadelphia. 1954. Price $5.75.

This is a 303 page book dealing with almost every conceivable emergency that might arise in routine office practice, but more especially in the emergency room of large municipal hospitals or in the emergency rooms of a hospital in any location.

The author has outlined procedures for emergency care in both the usual and the unusual cases that might come under the average physician's care regardless of his specialty. The procedures outlined are limited to the emergency care, and follow-up care is often assigned to one of the various specialties. The text deals with emergencies that might occur in any of the specialties and many of the sub-specialties. The text is brief and to the point in all instances. It is alphabetically indexed as to sub-topics.

One of the most useful and comprehensive topics dealt with is that pertaining to the poisons. The symptoms of the various poisons are given and emergency treatment outlined. The recommendations are explicit and appear to me to be the correct procedures. The toxic ingredients of many of the commercial preparations now on the market being used as pesticides, insecticides, sprays and solvents are all discussed, as well as the toxic chemicals used in industry, and methods dealing with excessive exposures to any of the harmful ingredients are outlined.

I do not agree with the emergency treatment suggested for diabetic coma. It is my opinion that the dosage of insulin might be decreased by at least one half in most instances. I do not feel that protamine zinc insulin has any place in the emergency treatment of diabetic coma.

The book is well printed and easily read. I can recommend it to general practitioners, physicians in industry, physicians in emergency rooms or apt to be assigned to emergency service in any hospital. Physicians would find it of use in their library, especially in their offices.

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C. W. M.

Fluoroscopy in Diagnostic Roentgenology, by Otto Deutschberger, M.D., Assistant Clinical Professor of Radiology, New York Medical College; Roentgenologist in Charge, Bird S. Coler Memorial Hospital, Associate Visiting Roentgenologist, Metropolitan Hospital, New York. With an Introduction by Frank J. Borrelli, M.D., Professor of Radiology, New York Medical College; Director of the Departments of Radiology, Flower Fifth Ave. Hospital, Metropolitan Hospital, Bird S. Coler Memorial Hospital, New York. 888 Illustrations on 523 Figures. W. B. Saunders Company, Philadelphia. 1955. Price $22.00.

This is an exhaustive work on fluoroscopy as a diagnostic method. The wealth of material shows a profound knowledge of the subject and extensive practice over many years. Designed especially for students of medicine and clinicians desirous of familiarizing themselves with fluoroscopic methods, yet the wide scope of the subject matter described should make it a welcome addition for the specialists in various fields who desire to familiarize themselves with roentgenologic methods. It is arranged in two parts; part one dealing with an exhaustive description of fluoroscopic apparatus and fluoroscopic methods, describing to the minutest detail the characteristics of various types of fluoroscopic apparatus, their advantages and disadvantages and the method of procedure for fluoroscopic examinations of all parts of the body; part two dealing with all phases of roentgenologic practice and all locations in the body.

It would seem that the material described indicates fields of operation far beyond anything which can at present be expected from fluoroscopy alone, practically encompassing the entire field of roentgenology. It emphasizes the prospects for greater intensification of the fluoroscopic image and describes the methods so far attempted in this field. It probably envisions the development of this field of roentgenologic diagnosis to the point at which it will practically equal roentgenography in detail of examination and surpass it in versatility. Surely no one can expect such far reaching results by fluoroscopy alone if dependent upon our present day methods alone. The wealth of material covered in the work is certainly indication of extensive experience in the field, valuable to roentgenologist and clinician alike. The arrangement of material differs somewhat from methods ordinarily pursued in presentation of this subject. Each region of the body is taken up separately with a complete analysis of the various possibilities of pathologic involvement peculiar to this area, regardless of the structures or anatomic system involved. This leads to a great deal of repetition but serves well the purpose of differential diagnosis. It should serve as a welcome addition to the field, especially to the clinician and general practitioner who desires to utilize roentgenologic methods to their most helpful degree.

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Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

Dr. J. W. Trimble of Chillicothe has been quite ill and confined to his home.

Dr. J. P. Ralston of Springfield was stricken with paralysis several weeks ago. He is in a serious condition.

Drs. W. W. Duke and Jabez N. Jackson were guests of the Henry County Medical Society at Clinton, November 10.

An epidemic of diphtheria at Cameron became so severe that the schools, churches and places of amusement were ordered closed. No deaths have occurred.

Drs. W. W. Duke, T. S. Milne, Howard Hill and S. Grover Burnett were guests of the Callaway County Medical Society at Fulton, November 11.

Dr. G. A. Jordan, assistant health commissioner of St. Louis, has been sued for $100,000 damages by Dr. T. E. Allen. Dr. Allen was recently discharged by Federal Judge D. P. Dyer, on a charge of misusing the mails. Dr. Jordan was a witness in the trial.

Dr. F. R. Morley of Sedalia has been seriously ill from blood poisoning that developed from an infected finger. For a while his life was despaired of but he is improving.

Dr. Hugh H. Young of Baltimore was the guest of the St. Louis Medical Society, November 6, and addressed that body on "The Surgery of Prostate." On the same evening Dr. Wm. L. Rodman, President of the American Medical Association, was an unexpected visitor and addressed the meeting.

Dr. H. S. Hill of Springfield was injured November 7, while on his way home from church and suffered a fracture of the femur. He is 72 years old. For many years he has been the secretary of the Southwest Missouri Medical Association.

The following physicians passed the examination of the State Board of Health, September 28-30, at Kansas City: R. L. Alsaker, R. Arnold, M. F. Atwood, L. Bernard, A. F. Bina, I. H. Boemer, G. W. Edwards, A. W. Fox, A. N. Gray, E. E. Griggs, O. A. Grote, H. Harvey, S. L. Haseltine, May E. U. Hubert, G. E. Jacobs, J. S. Jaques, F. D. Leiser, G. M. Pellettieri, Wm. Roney, S. P. Simmons, F. M. Slaughter, G. M. Smith, A. O. Tucker, J. E. White, J. W. Wilkerson. Eight applicants failed to pass.

TWENTY-FIVE YEARS AGO

The committee on Public Policy of the Missouri State Medical Association is opposed to Proposition No. 4, the proposed amendment to the Workmen's Compensation Act. It gives the compensation commission full power "to contract with physicians, surgeons and hospitals for medical and surgical treatment and the care and nursing of injured persons entitled to benefits from said fund." This clause proposes state medicine and contract medicine, two forms of practice that have brought medicine into disrepute wherever they have been established. While the present act is unfavorable to physicians as well as to employees in many respects, chiefly because it does not permit the employee to select his own physician and because of the small amount, $250, allowed for the sixty days, yet the act does permit the employer to select the physician thus distributing the medical service among many physicians.

The Woman's Auxiliary of the Missouri State Medical Association is justly proud of the election of Mrs. A. B. McGlothlan, of St. Joseph, as president-elect of the National Woman's Auxiliary. It is remembered that the national auxiliary came to Missouri for its president-elect in 1928 when Mrs. George H. Hoxie, of Kansas City, was honored with the high office.

Dr. LeRoy Abbott, St. Louis, chief surgeon at the Shriners' Hospital for Crippled Children, has resigned to accept a post as head of the department of orthopedics in Stanford University School of Medicine, San Francisco.

In recognition of his work on cancer, *Science* tells us Dr. Thomas S. Cullen, Baltimore, professor of clinical gynecology in the Johns Hopkins University School of Medicine, was presented with the degree of Doctor of Laws by the University of Toronto. Dr. Cullen was graduated in medicine by the University of Toronto in 1890.

The license of John R. Brinkley, Milford, Kansas, goat gland quack, was revoked on September 17 by the Kansas Board of Medical Examiners, on a charge of unprofessional conduct based upon complaints from residents of Missouri. Brinkley was licensed in Missouri by reciprocity with Kansas.

TEN YEARS AGO

Drs. R. A. Ritter and O. L. Seabaugh, Cape Girardeau, have been appointed to the board of health of Cape Girardeau County.

Lt. Col. Stanley L. Harrison, Clayton, was promoted to Colonel in July.

(Continued on page 905)

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Woman's Auxiliary

Mrs. Frank B. Leitz, *President*

The annual fall meeting of the executive board of the Woman's Auxiliary to the Missouri State Medical Association was held at the Hotel Bothwell, Sedalia, September 27 and 28.

At the dinner meeting Tuesday evening, Dr. W. S. Sewell, Chairman of the Council, Missouri State Medical Association, spoke. Dr. Sewell explained the organizational structure of the Missouri State Medical Association. He spoke of the $120,000 budget and how it is allocated. He told how doctors spend their lives working themselves out of jobs by striving to keep people well, and, if people are not well, doctors work toward making them well. Dr. Sewell mentioned recent criticism of doctors and stated that it is his observation that there are not many rich doctors, but that doctors and their families set for themselves a high standard of living. They believe in good education, good housing, good clothing and good food. Hence, they frequently give the impression of having more of this world's goods than they actually do have.

Following Dr. Sewell's talk, Mrs. Charles T. Shepherd, president-elect, presented "Moods, Modes and Past Presidents." Mrs. Shepherd reviewed the history of the Auxiliary since it was founded in 1924. Clothes from the 1920's, the 1930's and the 1940's were modeled by St. Louis and St. Louis County Auxiliary members.

Past President's pins were presented by Dr. Sewell to the following ten past presidents: Mrs. Willard Bartlett, Sr., Mrs. U. J. Busieck, Mrs. M. Pinson Neal, Mrs. Herbert L. Mantz, Mrs. Robert C. Haynes, Mrs. Harry M. Gilkey, Mrs. Dwight T. Van Del, Mrs. Richard A. Sutter, Mrs. C. Alex McBurney and Mrs. W. E. Martin. Pins will be sent to seventeen past presidents who were not able to attend. Four past presidents, Mrs. M. P. Overholzer, Mrs. A. W. McAlester, Mrs. W. H. Goodson, and Mrs. W. L. Allee are deceased.

Following the pinning, lovely orchid corsages were presented to past presidents by Mr. Ray McIntyre, Field Secretary, Missouri State Medical Association. Mrs. Willard Bartlett, our organizer and fifth president, was presented with a beautiful white orchid. Both Dr. Sewell and Mr. McIntyre took advantage of the situation and included a buss, a kiss, or a smack, depending on the inspiration of the moment and the particular lady being given recognition.

The business meeting on Wednesday morning was well attended. Unusually fine progress reports were presented by officers, chairmen and county auxiliary presidents.

Dr. James R. Amos, Director, Division of Health of Missouri, was the luncheon speaker on the topic, "Active Leadership in Community Health."

The local committee on arrangements with Mrs. A. J. Campbell as chairman and Mrs. J. W. Boger as cochairman left not a stone unturned in its careful, thoughtful planning for our pleasure and comfort.

Dr. Pete Siegel, president of the Pettis County Medical Society, Dr. A. J. Campbell, and Dr. C. Gordon Stauffacher joined us for dinner on Tuesday. It is our observation that Dr. Sewell, Mr. McIntyre, and these three doctors enjoyed "Moods, Modes, and Past Presidents" even more than did the Auxiliary members.

Many thanks to members of the Missouri State Medical Association for their share in making this annual fall meeting a never-to-be-forgotten experience.

Capsule Clinics

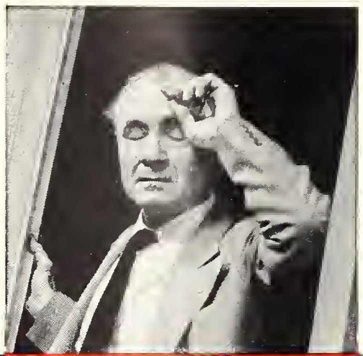
Irving A. Wien, M.D.

- The number of marriages in the United States has decreased in recent years due to the unusually large number of marriages during and immediately after World War II and a decrease in population at the ages where marriage rates are the highest. Statistical Bulletin, Metropolitan Life Insurance Co. **36** (May) 1955.

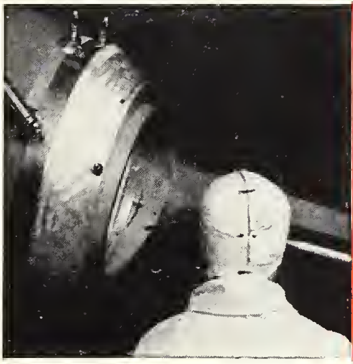
- The lymph vessels from the jejunum and ileum often are visible. They are known as "lacteals" because the absorbed food constituents which they contain resemble milk, as a result of fat globules suspended in lymph. Mayo, C. W.: Surgery of the Small and Large Intestines, Handbook of Operative Surgery, Year Book Publishers, Inc., Chicago, 1955.

- In cirrhosis of the liver bleeding from esophageal varices occurred in 59.2 per cent of 200 patients while gastric varices caused bleeding in only 2.6 per cent. In 29 per cent of these cases bleeding occurred from more than one lesion of the upper alimentary tract. Fainer, D. C., and Halsted, J. A.: J.A.M.A. **157** (January 29) 1955.

*Ménière's syndrome,
cerebral arteriosclerosis,
fenestration surgery,
streptomycin toxicity*



radiation therapy



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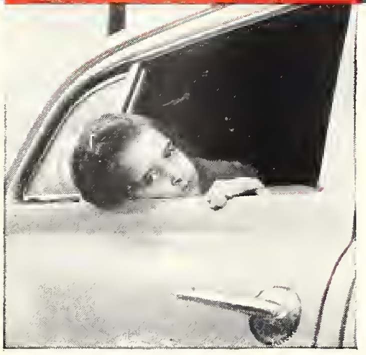

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Missouri Academy of General Practice

Kenneth Glover, M.D.

Membership of American Academy of General Practice

On September 2, 1955, the Commission on Membership and Credentials met in Hotel Muehlebach in Kansas City. Chairman, William M. Sproul, called the meeting to order. For clarification the following discussion is given. Membership in the American Academy of General Practice is chiefly of the following types:

1. Active members, those physicians who are doing general practice, actively engaged and who have fulfilled the requirements of dues and the postgraduate training, 30 hours of which considered formal and 100 hours informal training in three years.

2. Associate membership is divided into the following categories:

A. Any physician in active practice who meets all requirements of active membership except the residency or the alternative practice requirements after January 1, 1956.

B. Interns and residents engaged in training.

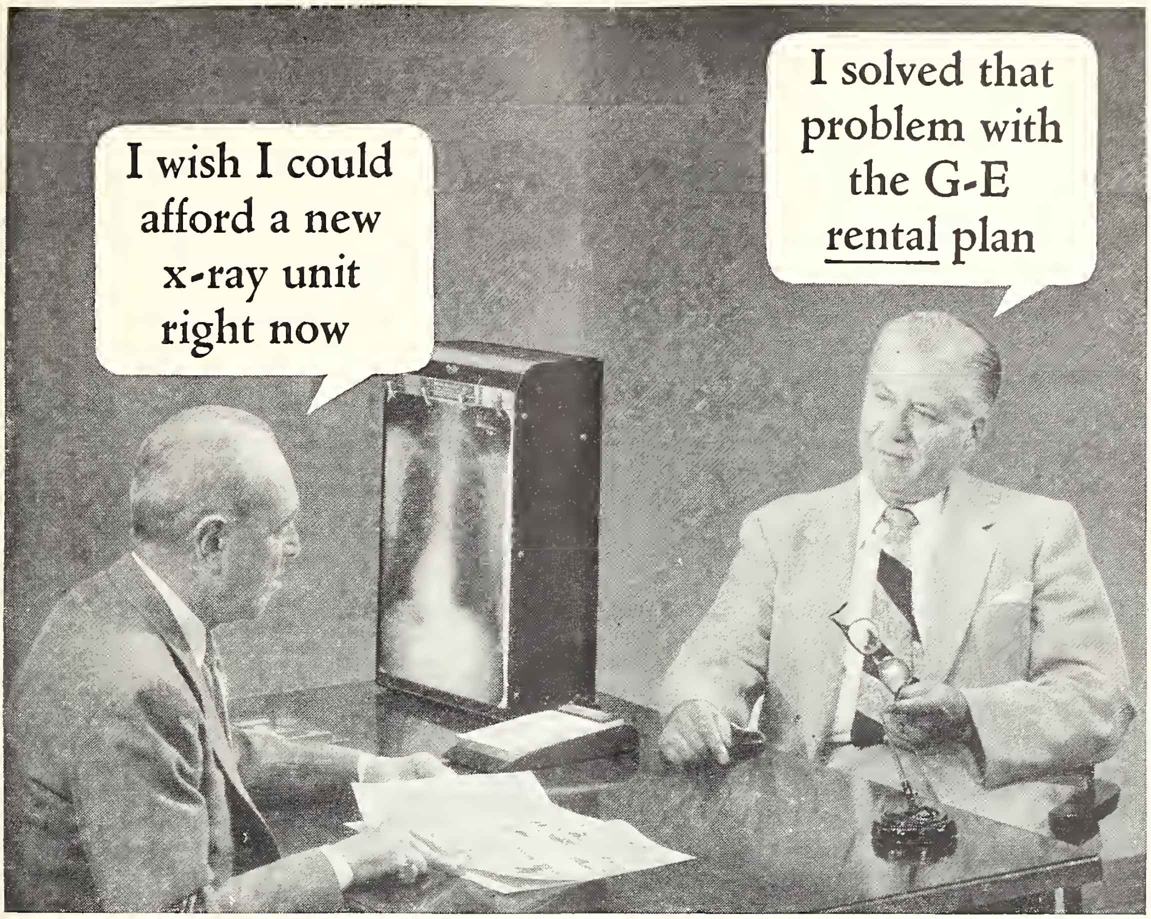
C. Full time salaried physicians in the following classifications:

a. Industrial medicine.
b. A branch of Military service.
c. Veterans Administration.
d. Public Health Service.
e. Other similar capacities.

Those physicians who remain ineligible for active membership may be reelected to this classification annually, however, if they become eligible for active membership they must be elected to active membership within one year. One exception to this interpretation will be made for full time physician employees in teaching institutions who have been and presently are classified as active members. No changes were made in the other classifications of membership.

At the present time the estimated increase in membership for 1955 is 3200. This will still be below the membership gain in 1948 and 1949. The percentage of possible members in this general practice organization is still well below 50 per cent. However, in spite of the percentage of enrollment, this organization is looked upon as a spokesman for general practitioners. For that reason active membership is encouraged. The thinking now is that membership should be based more nearly upon qualifications and desirabilities rather than numbers of members. We have accomplished part of the purpose for which this organization was established, that of encouraging postgraduate training and encouraging hospital benefits on the basis of ability. One of the slogans presented at this meeting was "Quality without numbers" and a better slogan was recommended that we adopt, "Quality with numbers" for the organization as a whole. With the organization growing as it is with the requirements for sustained membership becoming as they are, not too rigid but rigid enough to insure better attempts at postgraduate training, we feel that it is an honor to belong to this organization. It is new and it has many wrinkles to be ironed out, but the purpose is good. More and more general practitioners will find, not only now but later, that their policies are partially made by this organization and that in the AMA this organization's opinions are highly valued.

In headquarters' bulletin, dated September 18, the Board of Directors of the American Academy of General Practice made some statements concerning the Salk vaccine policy. I wish to include them here. "The Board of Directors of the American Academy of General Practice unanimously adopted a resolution urging the family doctors of America to cooperate to the fullest in administering the Salk vaccine to their patients who desire it. The board declared that no family should be denied this protection for financial reasons. The medical profession will have no control over the cost or supply of the vaccine itself. The Board stated that immunization against poliomyelitis should be administered on the same basis as other immunization procedures." The Board further adopted the following policy: "It recommends that Federal funds allocated to states for purchase of Salk vaccine be expended first for immunization of children who are wards of the public, or eleemosynary institutions or otherwise receiving relief funds and second for distribution to private physicians to administer in the same manner as other immunizations are given. In all events the vaccine program should be under the supervision of a State Medical Society."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Missouri State Board of Medical Examiners

Duff S. Allen, M.D., *President*

The Foreign Educated Physician

During the last fifty years the Association of American Medical Colleges, working with the Council on Medical Education and Hospitals of the American Medical Association, have by great effort raised the standards of American medical education to the point at which now we have only Grade A medical schools in the United States. The various State Boards of Medical Examiners have put the teeth into this effort by refusing to accept for examination graduates from medical schools in America who have not been approved by these two organizations.

An attempt was made by the Council on Medical Education and Hospitals of the American Medical Association to establish an approved list of foreign medical schools. There are some 600 foreign schools whose graduates are coming to America. After establishing a list of fifty of these schools and then after having had a sufficient number of graduates of these approved schools who took our State Board Examinations, it became evident that many of these schools on the approved list were not equal to our own schools. In addition to this, the task of examining and approving the remaining 550 medical schools, for many reasons, was considered to be an effort too great to undertake.

In April 1954 the Council on Medical Education and Hospitals held a meeting in Washington, D. C., to which twenty-two organizations were invited. From this meeting the Cooperative Committee on Graduates of Foreign Medical Schools was formed. This Cooperative Committee consists of three members from the Association of American Medical Colleges, three members from the American Medical Association, three members from the Federation of State Medical Boards and one member from the American Hospital Association.

Two major principles were enunciated by this Committee. The first was the need for the foreign educated physician to present evidence of having attained the same level of professional competence as graduates of American schools, and the second was the necessity for devising an acceptable mechanism for measuring the professional competence of these foreign educated candidates. They would then be approved individually and referred to the various licensing boards for examination.

The Journal of Medical Education for March 1955 carries a report of this Committee which provides for a preliminary examination which would serve as an early screening device and which would eliminate quickly and at relatively small costs those candidates grossly deficient in medical education. If the candidate passed this examination, then a more comprehensive examination would be given. This comprehensive examination might be comparable to the present oral-screening examination given by the faculty of the two medical schools in Michigan.

I should like to quote a paragraph in the report of the Cooperative Committee for evaluation of medical credentials: "Standards for satisfactory credentials were set up in the committee report as follows: (1) a minimum of 18 years total formal education; (2) a minimum of 32 months of this time in attendance and direct study of medicine excluding any time devoted to what would be considered pre-medical study in the U. S.; (3) the latter rather than the former would be required of all physicians from any country where the minimum standards do not constitute sufficient education achievement for licensure in the U. S.; (4) evidence of satisfactory completion of the above described courses of study; (5) evidence of acceptable moral and ethical behavior."

Fortunately, the State Board of Medical Examiners in Missouri has not been obliged to deal with large numbers of candidates who have graduated from these foreign medical schools. However, there were three times as many applicants in 1955 as there were in 1954. The Board has been able to screen these few applicants in a satisfactory manner but the time does not seem to be far distant when a screening mechanism such as that being developed by the Cooperative Committee on Graduates of Foreign Medical Schools will be most helpful.

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Roentgen Therapy of Subdeltoid Tendinitis and Bursitis

Analysis of 159 Cases Treated With Intermediate Radiation Therapy

M. SHOSS, M.D., and T. G. OTTO, M.D., *Cape Girardeau*

It is the purpose of this paper to analyze a follow-up study of 159 cases of subdeltoid tendinitis and bursitis and to relate this study with others that have been reported in the literature. All of the cases here reported received intermediate x-ray therapy. Tendinitis and bursitis of the shoulder is so commonly encountered in office practice, and can be so excruciatingly painful as to totally disable the patient, that it seems pertinent to determine the most simple, rapid and effective form of therapy. It will be seen that many different forms of treatment are accepted as effective. The series of cases includes those with and without calcific deposits in the tendon structures and the cases in general are divided into the acute and chronic types. This condition is known by a multitude of names in the literature, but we prefer to call it subdeltoid tendinitis and bursitis since it is a disease probably having its origin in the musculo-tendinous cuff of the shoulder joint. It is probable that the bursa is involved secondarily and the shoulder joint itself is not involved.

ANATOMY

In order to discuss bursitis of the shoulder a brief review of the anatomy is given. The shoulder joint is constructed as a loose ball and socket type joint with a wide range of motion. If the motion is impaired by pain or stiffness, the use of the entire arm is severely limited. The shallow glenoid cavity of the scapula is deepened by the glenoid labrum. The head of the humerus articulates loosely with the glenoid and is held in place by a capsule that is attached to the margin of the glenoid and the anatomic neck of the humerus. Weak ligaments, the coraco-humeral and gleno-humeral, reinforce the capsule. Tendons of the muscles of the musculo-tendinous cuff play a large part in stabilizing the joint. Anteriorly and superiorly is the long head of the biceps. The teres minor, infraspinatus, supraspinatus and subscapularis muscles form the musculo-tendinous cuff of reinforcement and the attachments are intimately blended into the capsule of the joint. Some of these muscle tendons have bursae. There is one between the subscapularis and glenoid and one in the bicipital sulcus. The important bursa lies outside the capsule and the musculo-tendinous cuff and is called the subacromial or subdeltoid bursa. It separates the deltoid and the coraco-acromial ligament, with its associated structures, from the proximal end of the humerus and its tendinous attachments to allow for free motion in abduction and rotation. The acromion process and coracoid process with the coraco-acromial ligament forms a wide superior arch or buttress to deepen the joint stability. The large deltoid muscle overlies all of these structures. The tendon of the supraspinatus muscle is immediately below the floor of the subacromial bursa and it is the tendon that is usually, though not always, involved in the disease process.[7]

INCIDENCE

As evidenced in our findings the incidence of the disease appears to be increasing in our aging population, since it is a disease of middle and later life. Our average age was 47.6 years which is consistent with similar series reported. Our findings reveal that there is no constant sex predilection although it is slightly more common in the female.

ETIOLOGY

The etiology of bursitis is not thoroughly understood. No direct exciting cause has been discovered. There have been many scientific studies performed so that there is now some degree of uniformity in the understanding of the disease process. There is little doubt but that the shoulder joint is among the first areas in the body to show the degenerative changes of age. Some feel that this is on the basis of a mechanical-physiologic weakness, possibly associated with man's transition to the upright position.[23] There are a number of similarly vulnerable weaknesses which occur in other body regions and where similar lesions may develop. Necessarily, the shoulder joint is accessible to many strains and trivial injuries regardless of the work performed and in every phase of man's activity. It is well accepted that subdeltoid tendinitis commences with the degenerative changes in the tendon, as described in the experimental work of Wilson.[25] He found, in rabbits, loss of muscle tone with hyalinization of the muscle and tendon fibers and merging of these fibers with some degree of avascularity. This results in weakening of individual fibers which, under trivial strain, will rupture and undergo necrosis. The tendon reacts by inflammation as it would to a foreign body. Edema follows with increased tension and apparent pressure on nerve endings described in the tendons and muscles. Bursa may be involved secondarily showing some round cell infiltration in the synovial membrane with thickening of this mucosal layer. At this state the patient is in agonizing acute pain and any motion causes extreme exacerbation. The most accepted theory as to the formation of calcium in the tendon and bursa is that of Pederson and Key.[18] They feel that with the avascularity and necrosis that is present, the carbon dioxide tension is decreased and with increased alkalinity there is a precipitation of calcium salt in the disease area. This accentuates the tension already present adding to the acuteness of the situation. Anything that will relieve the tension developed will alleviate the pain. This can happen by a rupture of the bursa itself, or it can be done mechanically by needling or surgery. Lastly, it can be done by some procedure which will increase hyperemia with analgesia as is done by various types of radiation energy. This includes the use of ultrasonic sound and x-ray. This hyperemia probably also accounts for the resorption of calcium in so many of these cases. Eventually, irregardless of the therapy instituted, the disease will subside and healing will occur with no disability. One must understand and realize, however, that the underlying degenerative process still remains, and recurrences can occur. Some pain may be present at times despite the therapy instituted at the time of the acute disease process.

The chronic type of the disease represents those cases which have gone on to long standing pain, possibly only at intervals when the pain may be mild to acute. In these instances, the degenerative process is continually aggravated. Many of these cases will have calcium also and not infrequently it has a bony hardness to its appearance in contrast to the mushy creamlike calcium deposition present in the more acute disease. Certainly, we do not infrequently see patients in whom calcium is found incidentally in the subdeltoid area, or in similar regions, on routine examinations for other reasons. These may represent sequelae of degenerative disease of which the patient was not aware and which may have been asymptomatic. The late stage of the disease, after recurrent shoulder pain, results in progressive limitation of motion. At first it is primarily for the relief of pain but as scarring and fibrosis occurs this becomes more permanent. The final result is commonly called a frozen shoulder. Motion without pain is so limited that the immobility of the shoulder joint leads to almost total disability of the arm in an otherwise normal patient. It is in this phase of the disease that manipulation under anesthesia and surgical procedures of other types have found their greatest value in therapy. It is not intended to leave the impression that this is necessarily an aftermath of long standing disease since it can occur shortly after one acute episode when the response to conservative therapy may not be as adequate as usual, and the patient refuses to exercise the shoulder as soon as some relief is obtained. Such an instance accounted for one of the failures in our series.

Among the definitive etiologic factors often discussed in relation to this disease is the effect of trauma. There are some instances in which trauma has had a definite bearing on the onset, although, in our series of 159 cases, only twelve patients gave a definite history of trauma which may have influenced the onset. In many instances an uncertain history of trivial trauma or strain could be obtained on thorough questioning and it is doubtful that such an injury was of any serious consequence other than to speed up the normal degenerative process that was occurring. In accordance with other reports,[14, 21, 23, 26] we feel that trauma is merely an instigating factor rather than a causitive one. In instances in which a definite history of trauma is obtained, one should use special care to exclude fractures, dislocations or a complete tear of the supraspinatus tendon or other tendons of the musculo-tendinous cuff. The influence of vitamin E has been studied as a related factor. Toxic factors and endocrine and metabolic disturbances have been considered by others. Actually, we are still at a loss as to the exact underlying cause of the disease and it is entirely possible that all of these factors may have an influence on the pathologic process.

PATHOLOGY

Grossly, the pathology involves an acutely swollen bursa which is edematous, hyperemic and thickened with or without degeneration and calcium deposition in the supraspinatus or neighboring tendon structures beneath the bursal floor. The calcareous deposit occurs in the fibers of the tendon and the lesions show a homogenous gritty material with degenerated tendon fibers. The synovial lining of the bursa may be covered with numerous villi of varying sizes. There is increased vascularity and round cell infiltration. Hyalinization of the tendon fibers as well as areas of focal necrosis are noted microscopically.[18] It would be interesting to determine accurately if the tendon degeneration precedes the calcification and the bursal changes.

DIAGNOSIS

The diagnosis depends on the preceding history together with certain objective findings. In discussing diagnosis we have attempted to separate the cases in this series into an acute group and a chronic group so that the over all results will be comparable to reports in the literature. Also, in conformity with similar reports, we have defined these groups as follows:

1. Acute: Sudden onset of pain within the past ten days with limitation of motion. In this group are included four cases in which a vague history of shoulder pain was present for weeks or months with a sudden exacerbation of pain considered acute.
2. Chronic: Pain longer than ten days, usually considerably longer, either recurrent or constant with limitation of motion varying with the degree of pain and the use of the shoulder.

In acute phases pain comes on rather suddenly, often during the night and rapidly becomes more intense. Ordinary sedation and rest do not relieve the pain. The patient is often more comfortable standing or sitting than lying down. The pain is more severe in extremes of abduction and rotation. Motion of any degree in any direction is impossible inasmuch as the constant pain becomes excruciating. In most instances the pain is localized to the subacromial regions although it may radiate to the elbow or to the region of the deltoid insertion. Point tenderness is frequently encountered over the greater tuberosity and this is especially remarkable in the acute phase of the disease. In many of these instances calcification in the supraspinatus tendon is also present. A definite history of acute trauma should lead one to exclude the possibility of fracture, dislocation or musculotendinous cuff tear.

In the chronic cases the pain is more tolerable but chronically troublesome. It is sometimes present for many months and in these instances pain may be present only at certain ranges of motion, particularly in abduction and external rotation. Some of them, when chronic, are limited in motion because of adhesions between the capsule and the bursa. This can lead to a frozen shoulder which is more commonly seen following immobilization of the arm with necessary disuse of the shoulder. The history in itself will distinguish the chronicity of the disease.

Roentgen examination is an essential diagnostic measure primarily to exclude any other disease process or injury of the bony structures in the shoulder girdle. The presence of calcium in the subdeltoid region will be of value in making a specific diagnosis of this disease. Routinely, films should be obtained in external and internal rotation so that calcific deposits overlying the greater tuberosity will not be overlooked. A roentgen examination is not essential to the diagnosis but is essential in ruling out injuries and tumors.

TREATMENT

Treatment of this disease is varied. There are those who feel that no specific therapy other than supportive care is required since even the acute cases will subside if given sufficient time.[20, 22] This time varies considerably and some authors feel that from three to six months or even a matter of years is required before the process completely subsides. We feel, as do many others, that the degree of morbidity and disability is unwarranted when the process has been found to respond so well to conservative treatment.[23] When one sees these patients one is faced with an acutely ill individual who is completely disabled and some form of therapy seems indicated to relieve the pain and disability as rapidly as possible, even from an economic and industrial standpoint, let alone the discomfort. Local injections with novacain and needling of calcific deposits have been beneficial in many instances and good results have been reported.[5, 10, 11] For a large number it is technically not easy to do and, frequently, in our hands, incomplete and unsatisfactory relief is obtained. Hydrocortone has been used with increasing frequency recently and several reports indicate its effectiveness.[12, 17, 24] Miley and LaPlume[16] report the use of the Knott technic of irradiated blood therapy. This is an ingenious method but is technically unsuitable for average wide-spread use and the results are not at present any better than other methods. Iron Cacodylate by intravenous injection has been used extensively by Bensema,[4] Pelner[19] and others with interestingly good results. There is no argument but that surgical excision of calcified deposits offers dramatic rapid relief. It is beneficial not only in the acute episodes, but in long standing chronic episodes with large calcific deposits.[5] In the latter group in whom the deposits are of bony hardness and the disease process is of long standing, surgery is no doubt the treatment of choice. One of our acute cases was so painful that surgery was done before x-ray therapy had a chance to give relief. In this connection, some of the acute cases of this disease are frequently aggravated and the pain greatly intensified by local injections and needlings. Physical therapy other than active rapid use has played a small part in treatment of this disease.[6, 8] Alone it is of little value and must be used in connection with other definitive treatment. Ultrasonic sound has had its trial with some degree of success but it is not readily available.[2] We agree in general with the findings of Garber[9] and Caldwell[5] and other authors that conservative therapy is the method of choice in all cases, to be followed by surgery if the response to the preliminary therapy is inadequate.

The greatest interest has been centered on the use of x-ray therapy and the results have been exceedingly good. We are primarily concerned with this mode of treatment since it requires the least effort on the part of the patient and physician, less discomfort to the patient and it is economic inasmuch as the great majority of these cases can be treated on an out-patient basis. All of our cases, whether acute or chronic, received radiation therapy as a primary treatment. Numerous varying technics have been described in the literature. Most authors who have reported large series of cases receiving x-ray therapy, have used 200 KV, usually with ½ mm. of copper and 1 mm. of aluminum filtration, 15 to 25 ma. and 50 CM-TSD. It has frequently been mentioned, however, that probably lower KV therapy would be preferable, especially in the range considered as intermediate therapy by the radiologists. Witt and Titterington[26] reported therapy with 100 KV beam with results comparable to that with the 200 KV beam. There has been considerable variation as to the size of the ports used, number of ports as well as the dosage administered per treatment and total dosage administered to the region. Amazingly enough the results are comparably good regardless of the specific technic used. It would be well, however, to arrive at some optimum beam intensity which would give the best results as well as to attempt to establish some uniformity of technic factors so that the most desired results can be expected.

In the 159 cases here reported, essentially the same technical factors were used. The factors were as follows: 140 KV, 15 MA, 50 CM-TSD, ¼ mm. copper and 1 mm. of aluminum (HVL 0.5 mm. copper). The majority of the patients received daily treatments of 150 r in air to alternate anterior and posterior 15 by 15 mm. ports to the shoulder on alternate days for a total of six days. Therefore, a total dosage of 450 r in air was administered to each anterior and posterior port. Treatments were administered six days a week. A small percentage of the patients received only four to five treatments, either because they had received one or more treatments elsewhere or failure to return to complete the course. This, however, was not thought to be sufficiently significant to be noteworthy. Also, a small number of patients who lived some distance from the therapy center, received two treatments of 150 r in air daily to anterior and posterior ports with treatments being administered every other day. No essential difference in response was noted in these instances although these patients did in general experience some exacerbation of pain especially in the acute cases after the first day of two treatments. We feel that giving these patients a larger initial dosage caused the exacerbation of pain, if only temporarily. Only one course of therapy was administered and except in six instances were there recurrences not less than ten months to three years after the first treatment.

MATERIAL

A total of 159 consecutive patients treated with external radiation using the described technic form the basis of the present report.

TABLE 1

SHOULDERS TREATED
159 Patients

Patients Receiving	*Rt.*	*Lt.*	*Total*
Treatment to one shoulder	89	67	156 (98.1%)
Patients with bilateral disease	3	3	3 (1.9%)
Patients who had re-treatment for recurrences	5	1	
	97 (57.7%)	71 (42.3%)	159
	168		

Six recurrences (re-treatment) in 162 shoulders treated—3.7%.

Table 1 enumerates the distribution of these cases and reveals that a total of 168 shoulders were treated, six of which were treated on two occasions as a result of recurrences. There were three patients with bilateral disease. The three patients who had bilateral involvement did not have concurrent involvement of both shoulders but from six months to seventeen months after the first treatment course. The six patients who had recurrences in the same shoulder previously treated developed the recurrence ten months to forty-six months after the first treatment course. All cases treated were referred for therapy with the presumptive diagnosis of subdeltoid tendinitis or bursitis and with the diagnosis confirmed by physical examination and/or radiographic examination prior to the institution of radiation therapy. Sex distribution is as noted on table 2.

TABLE 2

SEX DISTRIBUTION

Female	91 (57.2%)
Male	68 (42.8%)
Total pts.	159 (100.0%)

These findings correspond with the expected sex distribution. Age distribution is tabulated in table 3. As noted, only seventy ages were recorded with an average age of 47.6 years.

TABLE 3

AGE DISTRIBUTION
Only 70 Ages Recorded of 159 Patients

Males	*Average Age*
38 with age	47.6 years
Females	
32 with age	47.6 years
Total 70	47.6 years

The average age of the thirty-eight males recorded as well as thirty-two females ages recorded was also 47.6 years. The findings on x-ray examination made prior to therapy is given on table 4.

TABLE 4
RADIOGRAPHIC FINDINGS

	Acute	*Chronic*	*Total*
Calcium present	76 (73.8%)	27 (26.2%)	103 (64.4% of 160 cases)
No calcium present	17 (28.8%)	40 (70.2%)	57 (35.6% of 160 cases)
Not examined and no films available ..			8
	93 (58.1% of 160 cases)	67 (41.9% of 160 cases)	168

There were only eight of the 168 shoulders treated in which x-ray examination was not done or the films were not available. Of the 160 cases 64.4 per cent having x-ray examination revealed calcium in the subdeltoid region which is slightly greater than would be expected. Only 35.6 per cent of the 160 cases revealed no calcium. As noted, seventy-six or 73.8 per cent of the 103 cases with calcium were diagnosed as acute cases. This is contrary to the findings in those patients who did not show calcium in which only 29.8 per cent were diagnosed as acute and 70.2 per cent as chronic.

Of the 168 shoulders treated, including the bilateral cases and the six recurrences, they were classified as given on table 5.

TABLE 5
CLASSIFICATION OF CASES
168 Total Shoulders

Acute	94 (56%)	Including three bilateral and five recurrences and four with acute disease preceded by vague pain for some time.
Chronic	74 (44%)	Including one recurrence.
Total	168	Shoulders treated.

Of the total of 168 shoulders treated as noted, ninety-four or 56 per cent were classified as acute and seventy-four or 44 per cent were classified as chronic.

There was a definite history of injury in twelve cases or 7.1 per cent which may have attributed to the onset of the disease. One of these was a treatment failure and was later diagnosed as a cuff tear rather than a tendinitis.

Follow-up on these cases is given on table 6.

As noted, the follow-up on the acute cases was unusually good with 94 per cent. In the seventy-four chronic cases adequate follow-up was obtained on sixty-five or 87.8 per cent. Only fifteen cases were inadequately followed for consideration in this series. Therefore, a total of 153 of the 168 shoulders treated had adequate follow-up for evaluation. Of these 153 cases on which follow-up was obtained, most of them responded to a questionnaire sent them and therefore the reports were subjective. The remaining few cases were followed by obtaining information through the referring physician or, if possible, with direct contact with the patient. The distribution of the follow-up study is given in table 6. Follow-up period is also given in table 6 and extended from three months to four years so that follow-up was thought to be adequate to properly evaluate the end results.

TABLE 6
FOLLOW-UP ON TOTAL SHOULDERS TREATED

	Follow-Up	*No Follow-Up*	*Total*
Acute	88 (94.0%)	6 (6.0%)	94 (100%)
Chronic	65 (87.8%)	9 (12.2%)	74 (100%)
	153 (91.1%)	15 (8.9%)	168 (100%)

DISTRIBUTION OF ALL CASES

12 Shoulders—Over 4 Years
30 Shoulders—Over 3 Years
32 Shoulders—Over 2 Years
46 Shoulders—Over 12 Months
48 Shoulders—Over 3-12 Months

Follow-up on the 103 shoulders which showed calcium in radiographic examination prior to therapy is given on table 7. The follow-up in these cases with calcium corresponds to the follow-up on the entire series. A total of 93.2 per cent or ninety-six shoulders which were found to have calcium on x-ray examination were adequately followed for re-evaluation.

TABLE 7
SHOULDERS WITH CALCIUM FOLLOW-UP
Total 103 Shoulders

	Follow-Up	*No Follow-Up*	*Total*
Acute	72 (94.7%)	4 (5.3%)	76 (100%)
Chronic	24 (88.8%)	3 (11.2%)	27 (100%)
	96 (93.2%)	7 (6.8%)	103 (100%)

Results of the therapy administered to the 153 shoulders included in this series and on whom adequate follow-up was obtained, is given in table 8. As noted of the 88 acute shoulders treated sixty-six or 75 per cent had no residual pain and eighteen or 20.4 per cent complained of occasional pain in the shoulder. There were four or 5.6 per cent failures in this group. The overall satisfactory results revealed eighty-four shoulders or 95.4 per cent with no pain or occasional pain following radiation therapy with the technic used. In the sixty-five chronic shoulders treated thirty-four or 52.3 per cent had no pain, twenty-two or 33.8 per cent had occasional pain and there was a total of nine or 13.9 failures. Therefore, a total of fifty-six obtained satisfactory results or 86.1 per cent. Total satisfactory results as noted in both the acute and chronic shoulders treated amounted to 100 (65.4 per cent) with no pain and forty (26.1 per cent) with occasional pain with a total 140 (91.5 per cent) with satisfactory results. There was a total of thirteen or 8.5 per cent failures in the 153 cases having an adequate follow-up.

Analysis of the results of ninety-six cases treated who had definite evidence of calcium in the

TABLE 8
PRELIMINARY RESULTS
153 Cases Followed-Up

	No Pain	*Occasional Pain*	*Satisfactory Results*	*Failures*	*Total*
Acute shoulders	66 (75 %)	18 (20.4%)	84 (95.4%)	4 (5.6%)	88 (100%)
Chronic shoulders	34 (52.3%)	22 (33.8%)	56 (86.1%)	9 (13.9%)	65 (100%)
	100 (65.4%)	40 (26.1%)	140 (91.5%)	13 (8.5%)	153 (100%)

TABLE 9
PRELIMINARY RESULTS WITH CALCIUM
96 Cases

	No Pain	*Acute Pain*	*Satisfactory Results*	*Failures*	*Total*
Acute with calcium	58 (80.6%)	12 (16.7%)	70 (97.3%)	2 (2.8%)	72 (100%)
Chronic with calcium	15 (62.5%)	6 (25.0%)	21 (87.5%)	3 (12.5%)	24 (100%)
	73 (76.0%)	18 (18.8%)	91 (94.8%)	5 (5.2%)	96 (100%)

subdeltoid region prior to therapy and who had adequate follow-up are given in table 9. The totals for both the acute and chronic groups with calcium reveals in a total of ninety-six cases followed up that there were seventy-three or 76.0 per cent with no pain, eighteen or 18.8 per cent with occasional pain or a total of satisfactory results in ninety-one or 94.8 per cent. There were five or 5.2 per cent failures.

A thorough study of the thirteen (8.5 per cent) failures described in both the acute and chronic groups in the total series reveals that of the four failures in the acute group there was one case classified as acute that had actually had inadequate radiation therapy to be included in the series. This patient was a young physician with acute and extremely severe pain in the right shoulder and with calcium present in the soft tissues. Twenty-four hours previously he had received another form of therapy consisting of needling and hydrocortone injection which temporarily relieved the pain. However, it returned and became more excruciating a few hours later. This patient was treated on an emergency basis and received two treatments within a period of eight hours with only 75 r in air being administered at each sitting with the intermediate therapy as used in the other cases. Twelve hours later the pain became so excruciating that an emergency surgical procedure was done to relieve the tension. It is questionable whether this case should be included in the series since there was inadequate therapy administered and the follow-up was for too short a period to evaluate the results. In three other failures in the acute group one received some relief from the radiation therapy but the pain did not completely subside until the patient had injections of hydrocortone into the shoulder with no pain eighteen months later. Another failure was in a female who had an acute episode of the right shoulder with no calcium and received some immediate relief from the radiation therapy, but the pain persisted and the patient was unable to cooperate with adequate exercises resulting in a frozen shoulder, later necessitating manipulation under anesthesia. The last acute case which was a failure was one in which calcium was present in the treated shoulder and the patient received considerable relief of the acute pain following radiation therapy. Later examination of the patient reveals no limitation of motion and no point tenderness over the area although there is occasional pain but not enough to limit the patient's normal activities. This last case is actually not a true failure but merely indicates that the underlying reparation process is progressing slowly or has resulted in permanent changes.

Re-evaluating the nine failures reported in the chronic group, there were four of these nine cases which we feel were misdiagnosed or too far advanced to respond to radiation therapy, although a trial of radiation therapy was instituted. One of these four cases followed an injury and later a cuff tear was diagnosed. Three of these cases were considered poor candidates for radiation therapy inasmuch as large calcific deposits were present in each of the shoulders treated and had been present for some time, having the appearance of bony hardness. These patients presented with chronic long standing disease extending over a period of from three to five years. They were given therapy primarily on a trial basis and the results revealed failures. Therefore, there were actually five failures in this chronic group in which radiation therapy was given as the prime mode of treatment.

Re-analysis of the final results, if the one acute case is excluded from the series as well as the four chronic cases discussed, is given in table 10.

As noted, of a total of 149 cases with adequate follow-up, eighty-five or 96.6 per cent of the acute cases would have had satisfactory results and three failures. In the chronic group fifty-six (91.8 per cent) would have had satisfactory results with only five or 8.2 per cent failures. Total results then would be 141 of 149 or 94.6 per cent satisfactory results in both the acute and chronic groups and only eight or 5.4 per cent true failures.

Further breakdown of the results reported in relationship to the length of time following radiation therapy for the final result to be obtained are given in table 11. The lower part of that table re-

TABLE 10

FINAL RESULTS

	No Pain	*Acute Pain*	*Satisfactory Results*	*Failures*	*Totals*
Acute	66 (75.0%)	19 (21.6%)	85 (96.6%)	3 (3.4%)	88 (100%)
Chronic	34 (55.7%)	22 (36.1%)	56 (91.8%)	5 (8.2%)	61 (100%)
	100 (67.1%)	41 (27.5%)	141 (94.6%)	8 (5.4%)	149 (100%)

FINAL RESULTS OF CASES WITH CALCIUM

	No Pain	*Acute Pain*	*Satisfactory Results*	*Failures*	*Totals*
Acute	58 (81.7%)	12 (16.9%)	70 (98.6%)	1 (1.4%)	71 (100%)
Chronic	15 (68.2%)	6 (27.3%)	21 (95.5%)	1 (4.5%)	22 (100%)
	73 (78.2%)	18 (19.4%)	91 (97.6%)	2 (2.4%)	93 (100%)

TABLE 11

FURTHER DETAILED BREAKDOWN OF SHOULDERS AS AGAINST TIME FOR RESULTS
153 Cases With Follow-Up

Time	*1 wk.*	*2 wks.*	*3 wks.*	*4 wks.*	*6 wks.*	*2 mo.*	*3 mo.*	*4 mo.*	*6 mo.*	*8 mo.*	*16-18 mo.*	*Failure*	*Totals*
Acute													
No pain......	32	8	9	5	4	1	6	0	1				66
Occ. pain....	8	2	2	1	1	2	0	1	1				18
No relief.....												4	4
Totals..........	40 (45.7%)	10 (11.1%)	11 (12.5%)	6 (6.8%)	5 (5.7%)	3 (3.4%)	6 (6.8%)	1 (1.1%)	2 (2.3%)			4 (3.4%)	88 (100%)
		(69.3%)						(3.4%)					
				(93.7%)									
Time	*1 wk.*	*2 wks.*	*3 wks.*	*4 wks.*	*6 wks.*	*2 mo.*	*3 mo.*	*4 mo.*	*6 mo.*	*8 mo.*	*16-18 mo.*	*Failure*	*Totals*
Chronic													
No pain......	8	2	3	4	1	3	5	3	2	2	1		34
Occ. pain....	2	2	7	4	1	4	0	0	1	1	0		22
No relief.....												9	9
Totals..........	10 (15.5%)	4 (5.9%)	10 (15.5%)	8 (12.3%)	2 (3.1%)	7 (10.7%)	5 (7.7%)	3 (4.6%)	3 (4.6%)	3 (4.6%)	1 (1.5%)	9 (13.8%)	65
		(36.9%)								(15.3%)			
				(70.7%)									

SIMILAR DETAILED BREAKDOWN OF SHOULDERS WITH CALCIUM PRESENT ON X-RAY
96 Cases With Follow-Up

Time	*1 wk.*	*2 wks.*	*3 wks.*	*4 wks.*	*6 wks.*	*2 mo.*	*3 mo.*	*4 mo.*	*6 mo.*	*8 mo.*	*16-18 mo.*	*Failure*	*Totals*
Acute													
No pain......	29	10	3	9	1	1	4	0	1	0	0		58
Occ. pain....	6	2	0	1	1	1	0	1	0	0	0		12
No relief.....												2	2
Totals..........	35 (48.6%)	12 (16.7%)	3 (4.1%)	10 (13.8%)	2 (2.8%)	2 (2.8%)	4 (5.6%)	1 (1.4%)	1 (1.4%)	0	0	2 (2.8%)	72 (100%)
			(69.4%)					(2.8%)					
				(94.4%)									
Time	*1 wk.*	*2 wks.*	*3 wks.*	*4 wks.*	*6 wks.*	*2 mo.*	*3 mo.*	*4 mo.*	*6 mo.*	*8 mo.*	*16-18 mo.*	*Failure*	*Totals*
Chronic													
No pain......	7	0	0	4	1	0	1	1	0	1	0		15
Occ. pain....	1	0	1	3	0	0	0	0	0	1	0		6
No relief.....												3	3
Totals..........	8 (33.0%)	0	1 (4.5%)	7 (29.3%)	1 (4.1%)	0	1 (4.1%)	1 (4.1%)	0	2 (8.3%)	0	3 (12.5%)	24 (100%)
		(37.5%)							(12.5%)				
				(75.0%)									

veals similar breakdown of the results in those cases with calcium present on the x-ray examination prior to therapy.

As is noted in this table 11, 45.7 per cent of the acute cases obtained satisfactory results within one week and a total of 69.3 per cent of the cases obtained satisfactory results within three weeks. Of all of the cases reported 93.2 per cent received satisfactory results within the first three months following therapy. Only three cases or 3.4 per cent required from four to six months to obtain the final results. In the chronic group only 15.5 per cent obtained satisfactory results within the first week and 36.9 within the first three weeks following therapy. A total of 70.0 per cent obtained satisfactory results within the first three months in this chronic group and 15.3 per cent required from four to eight months to obtain the final results. One patient stated that she continued to have pain for at least sixteen to eighteen months after which time the pain was completely relieved. As noted in the lower portion of the table of the 96 shoulders which had calcium present on the preliminary x-ray examination which were adequately followed up, a similar time interval distribution is noted comparable to that in the overall series described. There are those who may believe that some of these would have subsided without therapy of any kind, especially in the chronic group.

DISCUSSION

An analysis of the therapeutic results discussed here in correlation with a review of similar results in the literature are compared in table 12.

As noted both the preliminary results and the final results in our series are listed. Our results

TABLE 12

REVIEW OF LITERATURE ON RESULTS

Author	*X-ray Rx Cases*	*Acute* *Fav.*	*Acute* *No Rel.*	*Subacute* *Fav.*	*Subacute* *No Rel.*	*Chronic* *Fav.*	*Chronic* *No Rel.*	*Remarks*
Caldwell & Wm. Kaufman, 1950[5]	196	92 %	8 %	89%	11%	71%	18%	377 shoulders Rx-181. Otherwise acute 1-4 wks. Subac. 1-6 mo. Chronic—more than six mo. Rx with 200 KV therapy.
				80% Favorable 15% No Relief				
Witt & Titterington, 1951[26]	50	96 %	6 %			85%	23%	37 patients had deep 200 KV therapy. 13 superficial therapy 100 KV.
Young, 1946[27]	87	87.4%	12.6%	83%	17%	33%	67%	Acute—under 1 wk. Subac. 1-8 wks. Chronic—over 8 wk.
				58% Favorable 42% No Relief				
Abel & Lomhoff, 1949[1]	134	88 %	12 %	84%	16%	55%	45%	Acute—less than 2 mo. (60). Subac.—2-16 mo. (32). Chronic—6 mo. or longer (42). 200 KV Rx. Those classified no improvement and/or slight improvement are considered failures.
				70% Favorable 30% No Relief				
Steen & McCullough, 1951[24]	300	Over all effect Favorable 83.6%			No Relief 12.6%			Not separated into acute and chronic. 200 KV therapy.
Kratzman & Frankel[14]	200	98 %	2 %	96%	4%	76%	24%	Late follow-up on 157 acute cases—1 wk. or less. Subac. 1-4 wks. Chronic—more than 4 wk. 200 KV therapy.
	157	98.7%	1.3%	94%	6%	81%	19%	
				87.5% Favorable 12.5% No Relief				
Shoss & Otto	153	95.4%	5.6%			86.1%	13.9%	Preliminary results 140 KV therapy.
Shoss & Otto	149	96.6%	3.4%			91.8%	8.2%	Final results—140 KV.

correspond in general to the best results reported in the literature. Our results in the chronic group were uniformly successful. Some of the listed reports described a subacute and chronic group which we feel combined correspond to our chronic group by definition. These two groups have been summarized in table 12. This leads us to conclude that intermediate radiation therapy may be of some advantage in the chronic cases and is comparable to other more intense technics in the acute cases. The fewer number of recurrences in both chronic and acute groups is also notable and may be in favor of the intermediate beam therapy. The number of cases in which pain was exacerbated by therapy were few, which leads one to believe that this technic of smaller dosage with intermediate beam technic was the basis for this.

It is obvious that an accurate diagnosis is essential if one is to attempt to predict the results expected. However, as all realize, such a specific diagnosis cannot always be made. It is in these questionable cases and in long standing chronic cases, as the four failures described in our chronic series, in which radiation therapy is given on a trial basis possibly as a diagnostic or therapeutic test. It is felt that this is warranted since the amount of radiation administered is relatively small and the rewards may be worthwhile in many instances. If this and other conservative measures fail, more radical procedures are required if the disease is sufficiently disabling.

A slightly better result in the cases with calcium in our series is probably the result of a more accurate diagnosis in these cases. The improvement in results is slight, however, and is of questionable significance. However, in the acute cases, we feel that the presence of calcium does slightly improve the prognosis although this is probably not so in the chronic cases. The resolution of calcium following therapy was not included in the study since we feel that this has no bearing on the results of therapy in accordance with many reports in the literature.

An interesting observation is the relationship of time interval to end results for the entire series and for those cases with calcium, as in table 11. As indicated, the majority of all cases will respond completely in from three to four weeks although an appreciable number will improve slowly for the first three months. This is more true in the acute group than in the chronic, where this recuperative period may be even longer. This we feel re-emphasizes our present knowledge of the underlying pathologic process. The etiologic factors and the aging processes are still present. Healing, as in other tissues, will take time and this will vary from patient to patient, possibly influenced by the age of the patient and tissues, extent and longevity of the disease process and healing powers of the tissues. Considering the age groups in which this disease occurs, we realize the variations in healing response. These factors also determine the amount of scarring and fibrosis that occurs which probably accounts for the occasional pain present permanently in many of these patients. This re-emphasizes the importance of early diagnosis and therapy in this disease. This is true regardless of the type of therapy instituted although we feel that radiation therapy will alleviate the acute discomfort without further damaging the tissues already impaired as is true in the more radical procedures.

SUMMARY AND CONCLUSION

A series of 159 patients in whom 168 shoulders were treated with intermediate radiation therapy are presented with adequate follow-up on 153 shoulders. From this study the following conclusions can be drawn:

1. Radiation therapy offers the most rapid, convenient and satisfactory method of treatment. In our hands intermediate beam intensity resulted in

effects comparable to the best reported in the literature in the acute group and some improvement of the results in the chronic group.

2. The time interval for final results following therapy is short in the majority of the acute cases though this period may extend as long as three months or more. The period of recuperation is usually longer in the chronic group. These findings are consistent with the underlying degenerative nature of the disease.

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Intramedullary Spinal Cord Metastasis

From Carcinoma of the Colon Simulating Acute Ascending Myelitis

ORHAN M. SANSOY, M.D., *Clayton*

INTRAMEDULLARY metastatic tumors have been reported occasionally and the great majority of these lesions have been found to be metastatic lesions from carcinomas of the lung and breast and from melanomas. There are also solitary cases of intramedullary metastases reported by Buchholz (1898), Taniguchi (1904), Belz (1912), Cary (1913), C. B. Clay and A. H. Weiland (1951), Morton B. Cantor and Joseph M. Stein (1952). Only one authenticated case is reported by Nonne (1923). This was a middle aged man who developed rapidly ascending paralysis of the Landry type, with necropsy disclosing a small metastatic growth involving the pyramidal decussation, the neighboring tracts and the central gray matter. The primary growth was a small carcinoma in the lung.

On the other hand extramedullary metastatic spinal cord lesions are not uncommon. In fact, according to G. Wilson and C. Rupp, these lesions comprised 64 per cent of the cases of spinal cord neoplasm autopsied at the Philadelphia General Hospital. Neoplastic involvement of the substance of the cord was present in only two cases among fifty-three cases which were available to study. One was a case of primary tumor of the adrenal medulla: the other was a case of Hodgkin's disease. Only one patient's primary lesion was in the bowel.

After reviewing the available literature it appears that intramedullary metastasis from carcinoma of the colon is extremely rare. The following case of intramedullary metastasis is being recorded because of rarity and the rather unusual rapid course without any conspicuous symptoms and signs referable to the primary tumor.

CASE REPORT

This 75 year old white female was admitted to St. Louis County Hospital for the first time with a chief complaint of "inability to use the right leg." She had been in fairly good health with no significant complaints until approximately one week prior to admission, at which time the patient noted weakness of the right foot which gradually had progressed upward to involve the entire right leg. On admission she was unable to walk and also complained of paresthesia of the right leg and right lower quadrant of the abdomen. Inventory of system symptomatology revealed a chronic nonproductive cough of many years duration and a questionable presence of tarry stools during the week or two prior to admission. No serious illness had been present in the past and there had been no previous periods of hospitalization.

Physical examination on admission revealed a well developed, slightly obese white female who was alert and appeared in no acute distress. Her blood pressure was 180/90 mm. Hg. with temperature 98.6 F., pulse 96 per minute and respiration 20 per minute. The head and body in general revealed no external evidence of recent injury. The pupils reacted to light and accommodation; however, the left was greater than the right in diameter. Both were round and regular. Fundoscopic examination revealed no abnormalities. The external ear canals were stenotic, apparently the result of old healed otitis externa; however, hearing was good. The tongue extended in the mid-line. No palpable adenopathy was noted and the thyroid gland was not enlarged to external palpation. No masses were present in the breasts. The heart tones were regular and no murmurs were heard. Breath sounds were harsh through both lungs but no rales were evident. The liver, kidneys and spleen were not palpable and there was no abdominal mass or tenderness noted. Neurologic examination revealed diminished pin prick and light touch appreciation in association with complete motor loss in the right leg. The upper extremities were intact. Deep tendon reflexes were within physiologic limits, except the knee reflex was moderately hyperactive on the right leg. The plantar reflexes were questionable extensor type on the right and were flexor type on the left. The Hoffman sign was negative bilaterally.

LABORATORY STUDIES

Spinal Fluid.—Fluid was clear and colorless and contained no cells. Test for canal block was negative. Chloride was 702 mg. per cent, sugar 90 mg. per cent. Culture showed no growth. Quantity was insufficient for a Kahn test.

Urine.—Specific gravity was 1.017, reaction 4.5, sugar negative, albumin trace.

Blood.—White blood cells were 10,850 with differential of 77 segments, 2 stabs, 14 lymphocytes, 5 monocytes, 1 eosinophil and 1 basophil. Hg. was 15 grams per cent; hematocrit 45 per cent. Sodium was 132 meq.; potassium 5.5 meq.; chloride 82 med; nonprotein nitrogen 33 mg. per cent.

X-rays.—"There is an infiltrate radiating out from the right hilum which may be either inflammatory or neoplastic in origin. In addition there is an infiltration in the left base just above the diaphragm compatible with pneumonia."

Spine.—"There is a dorsal scoliosis with extensive degenerative arthritis of the dorsal and lumbar spine and bones of the lumbo-sacral joint. Considerable arteriosclerosis of the abdominal aorta is present. No evidence of metastatic neoplasia is present."

Skull.—"Extensive decalcification of the sella turcica is present."

Following admission, there was a relatively rapid onset of ascending paralysis which had progressed to evolve both extremities in two days and to the level of T-4 within four days. The patient complained of "tightness in the chest" and respirations were noted to be 28 per minute. Mild papilledema was noted bilaterally. The attending physician at that time considered the possibility of "acute ascending myelitis," "spinal cord CVA" or "metastatic tumor, possible from the lung."

Five days following admission the patient's temperature became elevated for the first time and was 100 F. This was thought to be due to pneumonia and antibiotics were administered. The temperature fluctuated between 98.6 and 102.2 F. for the next two days, then returned to normal during the remaining days of life. Respirations became more rapid (32 per minute) and labored on the sixth hospital day. The patient was placed in a respirator and a tracheotomy performed. Little improvement was evident following tracheotomy; however, the patient did appear to improve some while in the respirator.

Nine days following admission paralysis was at the level of T-3 and respirations were more labored in spite of minimal phlegm. The white cell count was then 17,700 with a Schilling differential of 83 segments, 5 stabs, 7 lymphocytes and 5 monocytes. The Hg. was 13.3 gms. per cent and the hematocrit was 44 per cent. Ten days following admission the patient was allowed out of the respirator for about ten minutes; however, she rapidly became cyanotic and had to be returned to it.

On the twelfth hospital day, intermittent episodes of cyanosis were evident even when the patient was in the respirator. About midnight the patient died.

PERTINENT AUTOPSY FINDINGS

Lungs.—The lungs disclosed vascular congestion and peribronchially there were minimal patchy areas which suggest early bronchopneumonia.

Liver.—The right hepatic lobe over the superior aspect and anteriorly disclosed a single yellowish nodulation measuring 1.5 cm. in diameter. On cut sections it appears to be well delineated from the normal hepatic tissue and firm in consistency.

Gastrointestinal Tract.—The esophagus, stomach, duodenum and small bowel revealed no abnormalities. The sigmoid colon disclosed an ulcerative lesion measuring 4.5 cm. in diameter. The base was somewhat excavated and the entire muscle wall was increased in thickness with little fat tissue attached to the outer surface of the lesion. Although the thickness of the wall was slightly increased and the ulcerative lesion was somewhat large, the lumen was only minimally decreased in diameter.

Brain and Spinal Cord.—The cerebrum's outer surface disclosed no gross lesions. The spinal cord revealed an area of yellowish color in the medullary parenchyma measuring approximately 2 cm. in length and located at the level of T-4. This formation was entirely in the medullary substance with no involvement of the dura mater, pia mater or arachnoid membranes. Cut sections of the brain and spinal medulla after six days of fixation in formalin reveal the former without gross abnormalities. The spinal medulla revealed the elongated nodulation grossly described, well delimited and entirely located in the medullary substance.

MICROSCOPIC EXAMINATION

Sigmoid.—Microscopic sections of the ulcerative lesion (fig. 1) grossly described reveal the mucosa partially destroyed and replacement of necrotic tissue is evident; however, the remaining glands, and chiefly the glandular structures located over the ulcer margin, are lined by pleomorphic and hyperchromatic cells which are invading the entire subjacent muscularis and the serosal layer. Mitotic figures are evident. Lymphatic and vascular invasion is present (fig. 2).

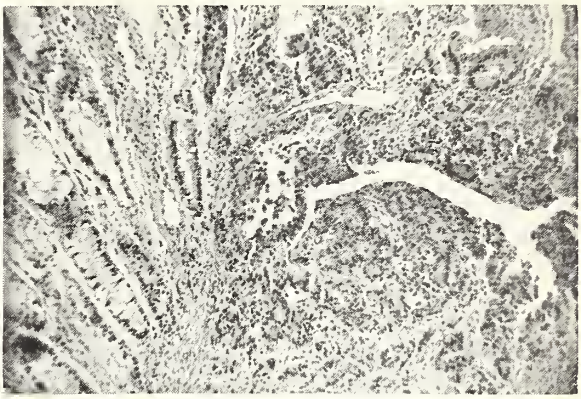
Fig. 1. Section illustrates area of primary tumor in the sigmoid colon showing transition from normal mucosa to carcinoma.

Spinal Cord.—Microscopic sections of the spinal cord (fig. 3) at the level of the upper dorsal segment (T-3) reveal the outer surface lined by the pia mater which penetrates into the median cleft (fissure median anterior and septum median posterior) subdividing the medulla partially in the usual two halfs. The outer layer or white matter is somewhat swollen and the gray matter or medullary layer is completely replaced by metastatic intestinal glands similar to those described in the primary site of the tumor. Extensive areas of necrosis are present between these glands.

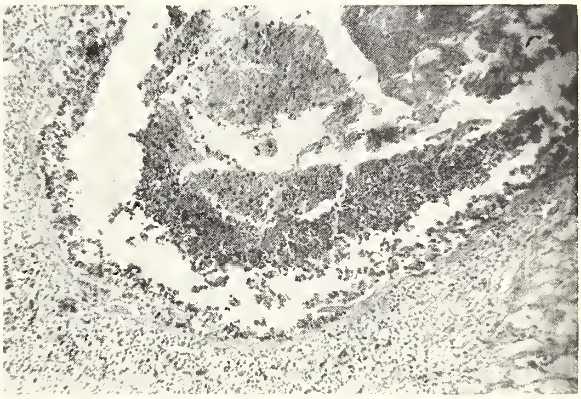
Fig. 2. Section illustrates a thin wall vein of the bowel mesentery. The lumen is filled by a tumor thrombus.

Liver.—Microscopic examination of the hepatic parenchyma reveals hepatic cells arranged in lobules around the central veins. Some of these cells contain

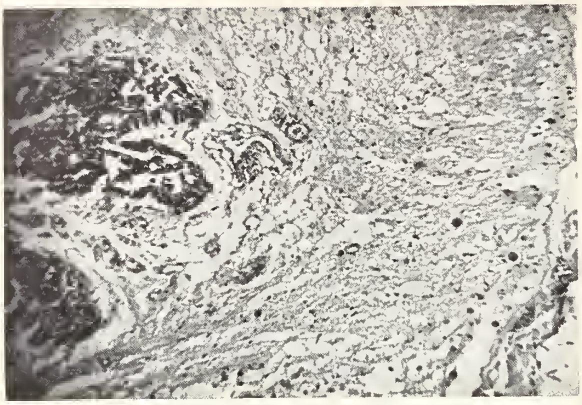

Fig. 3. Section illustrates area of intramedullary metastases in the spinal cord. Also present are corpora amylacea.

in the nuclei glycogen deposition. Focally there are aggregates of fat vacuoles present. The sinuses are moderately distorted and contain red blood cells. One of the sections discloses metastatic glandular cells (fig. 4) similar to those seen in the ulcerative lesion of the colon.

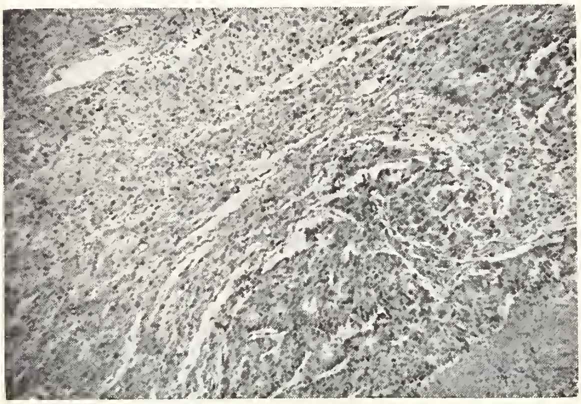

Fig. 4. Section illustrates solitary tumor metastasis in the liver.

Lymph Node.—Microscopic examination of a single nodulation gives the appearance of lymph node structure, with an intact capsule; however, the subjacent parenchyma is completely replaced by tumor cells and hyalinized tissue.

Brain.—Multiple sections of the brain tissue reveal no abnormalities. Along the cortical surface and adjacent to the ventricles there are numerous corpora amylacia.

COMMENT

In this particular case of carcinoma of the sigmoid colon with intramedullary and liver metastases, the hematogenous spread should be considered first in view of venous channel invasion by tumor cells, as it has been demonstrated in the microscopic sections. The pathway of spread has not as yet been definitely demonstrated, although there are different opinions in this regard. Batson and Anderson, after extensive studies of the vertebral veins by means of injecting radio opaque substances into human cadavers, have come to the conclusion that there is close association between the vertebral veins and the veins of the trunk and pelvis. They have demonstrated numerous connections between the vertebral system and the structures of the neck, chest and abdomen. Batson, in his article on the functions of the vertebral veins and their spread of metastases, states "The vertebral vein system consists of the epidural veins, the perivertebral veins, the veins of the thoraco-abdominal wall, the veins of the head and neck, and the veins of the walls of blood vessels of the extremities. It is a set of valveless vessels which carries blood under low pressures. In the subcutaneous tissue the smaller vessels provide a continuous network permitting ready permeation. Around the vertebral column the vascular bed of the system is much larger than required by the parts in which it is found. It is a system which is constantly subject to arrests and reversals in the direction of the flow of blood. The vertebral vein system parallels, connects with, and provides by-passes for, the portal, the pulmonary and the canal systems of veins and hence can provide in itself a pathway for the spread of disease between remote organs."

Another commonly accepted route of vascular spread of tumor cells to the cerebrospinal system is along the arterial tree. According to Batson, tumors of the lung are among the largest contributors to cerebral metastases and such a consideration could be supported since their positions allow direct passage of tumor cells to the heart and thence to the brain via the arterial system.

SUMMARY

1. A case of intramedullary spinal cord metastases from carcinoma of the colon simulating acute ascending myelitis has been presented and literature has been reviewed.

2. The pathway of spread has been discussed and literature reviewed.

St. Louis County Hospital.

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I want to thank Dr. R. O. Muether and Dr. John P. Pfaff for their encouragement and contribution to the preparation of this article.

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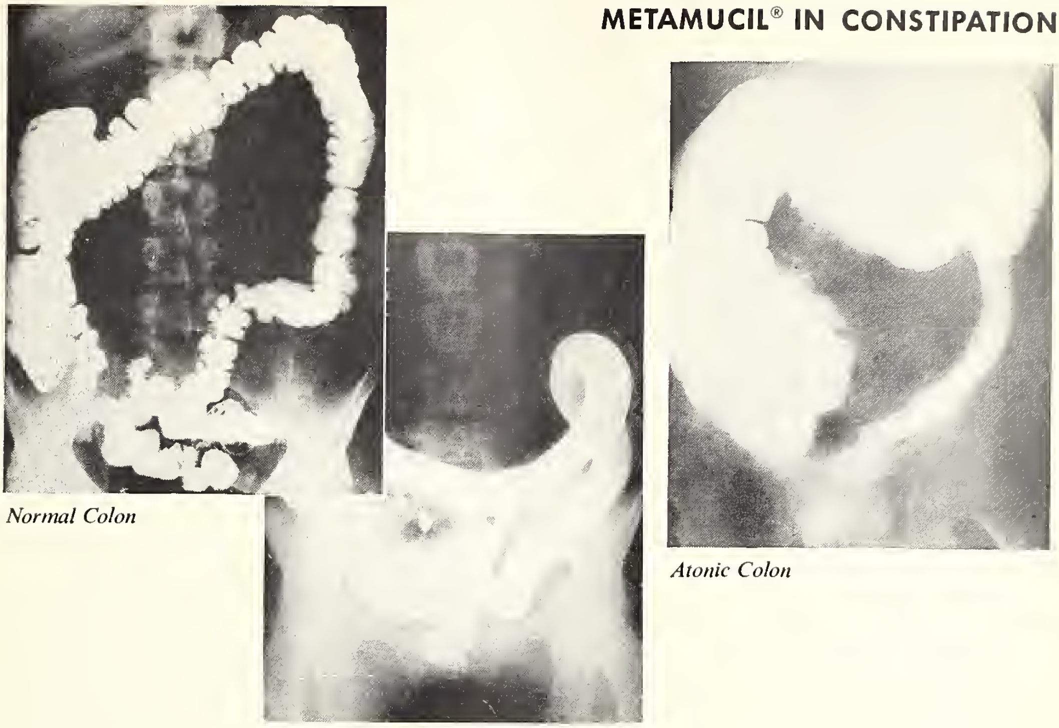

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Case Report

Broncholithiasis and Histoplasmin Sensitivity

FLORENCE E. MacINNIS, M.D., *Kansas City*

STUDIES CONDUCTED through the cooperative efforts of the United States Public Health Service, official and nonofficial Health and Tuberculosis Agencies and the physicians throughout Missouri, reveal a high incidence of pulmonary calcifications in chest roentgenograms of histoplasmin positive and tuberculin negative individuals.

Calcific densities of such varied size, shape and distribution are seen so frequently on routine x-rays that one is likely to attach no clinical importance to their presence.

Pulmonary calcification is often associated with calcification of the corresponding hilar lymph nodes. Roentgenologically calcific deposition in the root region is similar, whether the subject is a reactor to histoplasmin or to tuberculin.

Not all calcified lymph nodes which are seen at the pulmonary vascular roots are devoid of clinical significance. It is possible for the calcific nucleus of one of these nodes to migrate through the adjoining bronchial wall toward the lumen. When this occurs bronchial obstruction is the most common effect. "The wandering calculus is called a broncholith and the disease which it produces is termed broncholithiasis."[1] Bronchial obstruction is suggested by the presence of a contracted segment or lobe on the chest x-ray.

The subjective symptoms likely to be present in broncholithiasis are persistent cough, possible hemoptysis and expectoration of stone or stones.

Severe and recurrent infection of the lung distal to the point of obstruction is common in broncholithiasis.

The diagnosis of broncholithiasis is usually confirmed by the finding of bronchostenosis at bronchoscopy. It is established when a broncholith is recovered.

Eight of thirty-three proven cases in a study reported by Drs. C. B. Rubin and M. Ziskin[1] died of causes related to broncholithiasis. Massive hemorrhage, gangrenous pneumonia, pyopneumothorax and suppurative pericarditis were among the causes of death.

Prolonged bronchial obstruction enhances the possibility of massive pulmonary destruction.

When broncholithiasis is suspected, early bronchoscopic examination is essential if pulmonary tissue is to be conserved.

CASE REPORT

The following case report is of a woman, aged 29, who had an intractable cough for four weeks. Spasms of coughing came on repeatedly and suddenly, and lasted from one to one and one half hours. She commented that she had used varied medications prescribed by physicians and remedies suggested by friends to no avail. She also volunteered that on three previous occasions she had a similiar siege of cough which ended spontaneously after spitting up a small hard chunk about the size of a pea. These spasms of coughing in each instance followed attacks of bronchopneumonia, to which she was prone.

There were no definite physical findings of significance on examination of her chest. Slight curving of her fingernails was observed. Her white count was slightly elevated with predominance of polymorphonuclear leukocytes. Her sedimentation rate was also moderately fast.

A tuberculin test, using .0004 mg. of PPD intracutaneously, was interpreted as negative in forty-eight hours. Histoplasmin test with 1/10 of a cubic centimeter of 1 to 1,000 solution histoplasmin was positive. Sputum smear and culture were negative for acid-fast organisms. Chest roentgenograms showed a hazy increase in density in the right lower lung field, roughly triangular in shape, with the apex at the hilum and the base directed toward the diaphragm. There was a moderate amount of calcification throughout the right lung in the basilar segments, in the root region, and also in the apex. There was also calcification in the left lung peripherally and in the root. The lung fields other than these areas appeared to be well aerated without evidence of any exudative or infiltrative lesion.

This patient was hospitalized. The report on her bronchoscopy was as follows: "The cords, trachea and carina were normal. The left stem bronchus and all its branches were fully visualized and no abnormalities were seen. On the right side, the right upper lobe orifice was first visualized and found to be reflected downward almost completely occluding the stem bronchus. Just below the right upper lobe orifice was a very large broncholith which almost appeared free in the lumen. This was fragmented and removed piece meal without any undue difficulty and without any particular bleeding. After the removal of this, it was still impossible to pass the bronchoscope beyond the point of the obstruction and the medial wall of the bronchus extending as far down as could be seen, appeared to be calcified and composed primarily of broncholith. Further endoscopic removal appeared to be contraindicated, and the procedure was terminated at this point after having adequately opened up the lower lobe and middle lobe bronchial tree. It was the impression of the bronchoscopist that the patient had an eroding broncholith in the right stem bronchus."

The report on her bronchograms was as follows: "Following pontocaine spray, lipiodol was dropped into the right lung showing good visualization of the upper, middle and lower lobes. Only a single area of bronchiectatic change was identified in the right lower lobe in the posterior basal segments. The middle lobe

The organisms commonly involved in

Bronchopneumonia

D. pneumoniae (10,000 X)

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H. pertussis (7,500 X)

Staph. aureus (9,000 X)

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showed no abnormality. There was distortion of the right bronchus just below the bifurcations of the upper lobe. The irregularity of the bronchial wall corresponded to the large mass of calcification lying extrinsic to the bronchus.

"A second instillation of lipiodol was made into the left chest showing a normal bronchial tree."

The roentgenologist's impression was as follows: "Very wide spread calcific residues in both hilar areas and in the right upper lung field. Distortion of the bronchial tree by extrinsic calcification. Minimal bronchiectasis visualized in the posterior division of the basilar segments on the right."

After bronchoscopy she expectorated several chunks of broncholith and some blood.

Because of bronchostenosis and extensive broncholithiasis evident on bronchoscopy, causing repeated episodes of bronchopneumonia, cough, hemoptysis and expectoration of stones, she was operated upon.

On operation, the surgeon found extensive broncholithiasis with complete destruction of the stem bronchus to her right lower and middle lobe and a partial destruction of the right upper lobe. Initially, it appeared to him as if a pneumonectomy would be the only surgical procedure of any feasibility. After careful dissection, however, it was possible to remove only the right lower and middle lobes and to do a plastic repair to her bronchus so as to preserve the right upper lobe of her lung. He described this as one of the most extensive instances of broncholithiasis that he has encountered. At operation it was possible to remove a considerable amount of calcification from the remaining portion of her mediastinum, which actually was adjacent to her left stem bronchus, and which may have represented some potential danger as far as her left bronchial tree is concerned.

The pathologic report on tissue submitted, right lower and middle lobes and mediastinal nodes, was as follows: Gross Description: The right lower and middle lobes of the lung weighed 290 grams. The lung had a soft and fleshy feeling, practically no crepitation except in the anterior inferior margin of the lower lobe. The surface was purplish and dark reddish except in the lower margin where it was dark reddish tan. In the mid-lateral portion, presenting on the pleural surface of the lower lobe, there was an irregular, firm nodule measuring approximately 13 mm. in broadest dimension. A similar, poorly defined nodule was palpable in the upper portion of the lower lobe measuring approximately 1.0 cm. in broadest dimension. Section through the major bronchi showed them to contain a moderate amount of thick mucoid material in which were one or two fragments of calcific material. The smaller terminal bronchi were practically all plugged with a thick, stringy, mucoid material varying in color from dark yellow to reddish brown. The walls of the bronchi themselves showed no abnormality. Several firm hilar nodes were present, measuring up to 15 mm. in broadest dimension, which on section were generally dark blackish in color with areas of calcific yellowish deposits which were extremely difficult to section. Section through the lung tissue showed generally the same appearance throughout, a dark beefy, reddish brown tissue with a few areas more pinkish and crepitant. Section through the nodules palpable on the pleural surface of the lower lobe showed it to be almost entirely yellowish calcific deposit surrounded by a zone of quite firm grayish tissue.

The second specimen, labeled "mediastinal nodes," consisted of approximately 15 cc. of varying sized irregular fragments of material measuring up to 4.0 cm. in broadest dimension. They were varied in appearance from dark purplish, very friable material through black and yellow mottled rather soft tissue to a pinkish moderately firm tissue mottled with black and yellow and to fragments to quite hard yellowish calcific material.

Microscopic examination: The bronchi were described as moderately dilated. Much of the parenchyma was atelectatic and the collapsed alveolar spaces contained histiocytes sometimes loaded with a brownish pigment. An occasional emphysematous area alternated with atelectasis. There was rather marked interstitial fibrosis, particularly in the atelectatic areas. A single calcified lesion was seen in the parenchyma showing epithelioid cells and dense collagenous connective tissue at the periphery. A few infiltrating lymphocytes were seen and an occasional multinucleated giant cell of the Langhans type. The pathologic diagnosis was (1) chronic bronchiectasis (2) focal calcified nodules in the lung parenchyma and hilar lymph nodes consistent with primary complex.

The postoperative course of this patient was satisfactory. She returned to work within eight weeks. Fluoroscopy of her chest at that time showed a normal left lung and a clear right lung with the upper lobe well expanded.

CONCLUSIONS

This case study illustrates:

1. Chest roentgenograms showing pulmonary calcification at the roots accompanied by areas of atelectasis should be viewed with suspicion.

2. When the patient has a history of protracted cough, hemoptysis and repeated pulmonary infections with or without expectoration of stone, bronchoscopy is indicated.

3. While it is a common impression that broncholithiasis occurs from calcific tuberculous nodes, the healed primary complex of histoplasmosis has the same potentialities.

4. Early recognition of bronchostenosis in broncholithiasis is necessary to conserve lung tissue.

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Special Article

Jones Criteria (Modified)

For Guidance in the Diagnosis of Rheumatic Fever

In 1944, the late Dr. T. Duckett Jones published criteria for the diagnosis of rheumatic fever which have been accepted generally in the United States and in many parts of world. Subsequently Dr. Jones guided the revision of his criteria for use in the United Kingdom-United States Cooperative study on "The Relative Effectiveness of ACTH, Cortisone and Aspirin in the Treatment of Rheumatic Fever" and, just prior to his death, he participated in a conference on the revision of his original suggestions for use by the practicing physician. These modified Jones criteria are based in great measure upon his suggestions.

Rheumatic fever is related to previous infection with group A beta hemolytic streptococci, but the mechanism of the disease is unknown. Its boundaries are indefinite, and its differentiation from other diseases is sometimes impossible. There is no specific laboratory diagnostic test. The diagnosis test must therefore be arbitrary and empirical. Criteria herein set forth are aimed at identifying those individuals who have had or are having an attack of rheumatic fever. They make no attempt to measure rheumatic activity at any given time or to diagnose inactive rheumatic heart disease. Thus, following the designation of an illness as rheumatic fever, the existence of continued activity or the presence of inactive rheumatic heart disease may be indicated by criteria different from those outlined.

Criteria are necessary in order to minimize both overdiagnosis and underdiagnosis. The tendency to label as rheumatic fever a chronic febrile illness for which no obvious cause can be found is to be deplored. The tragedy which may lie in the wake of the false diagnosis of rheumatic fever may be even greater than the possible harm of missed recognition in questionable cases. The institution of effective prophylactic regimens requiring prolonged administration of sulfadiazine or antibiotic agents places a grave responsibility on the physician in the diagnosis of this illness.

In this statement, the diagnostic features of the disease are divided as originally proposed by Jones into major and minor categories dependent upon their relative occurrence in rheumatic fever and in other disease syndromes from which this disease must be differentiated. Thus, chorea is included among the major criteria while fever, a symptom common to many diseases, is placed in a minor category. These major and minor categories have no significance beyond their diagnostic import either as to prognosis, amount of "rheumatic activity" or severity of acute illness. Indeed, a severe manifestation of rheumatic fever such as rheumatic pneumonia is not included because it is difficult to differentiate from congestive cardiac failure and because it almost always occurs in patients whose rheumatic fever is so obvious as to offer no difficulty in diagnosis.

The presence of two major criteria or one major and two minor criteria indicates a high probability of the presence of rheumatic fever. In addition to the major and minor criteria to be used in the recommended formula, other manifestations have been listed which may be used to support the diagnosis. These criteria are not meant to substitute for the wisdom and judgment of the clinician. They are designed only to guide him toward a diagnosis of the disease with the suggestion that he follow carefully all questionable cases and restrict the diagnosis of rheumatic fever to illnesses which meet acceptable criteria.

MAJOR DIAGNOSTIC CRITERIA

I. *Carditis.*—Carditis as evidenced by any one of the following:

A. The presence of a significant apical systolic murmur,[1] apical mid-diastolic murmur[2] or basal diastolic murmur[3] in an individual without a history of previous rheumatic fever or in whom there is good reason to believe there was no pre-existing rheumatic heart disease; or a change in the character of any of these murmurs under observation in an individual with previous history of rheumatic fever or rheumatic heart disease.

B. Obviously increasing cardiac enlargement by x-ray.

C. Pericarditis manifested by a friction rub, pericardial effusion or definite electrocardiographic evidence.

D. Congestive heart failure (in a child or young adult under 25) in the absence of other causes.

II. *Polyarthritis.*—Polyarthritis tends to be migratory and is manifested by pain and limitation of active motion, or by tenderness, heat, redness

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Reprinted with permission from the September 1955 issue of *Modern Concepts of Cardiovascular Disease*.

This is a report of the Committee on Standards and Criteria for programs of care of the Council of Rheumatic Fever of the American Heart Association and has been approved by the executive committee of that council.

Committee on Standards and Criteria for Programs of Care: David D. Rutstein, M.D., Chairman; Walter Bauer, M.D.; Albert Dorfman, M.D.; Robert E. Gross, M.D.; John A. Lichty, M.D.; Helen B. Taussig, M.D.; Ruth Whittemore, M.D. Other Members of the Committee are: Miss Katherine Hagberg, Mary E. Parker, R. N.

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TABLE 1

JONES CRITERIA (MODIFIED) FOR GUIDANCE IN THE DIAGNOSIS OF RHEUMATIC FEVER

Major Criteria	Minor Criteria
I. Carditis	I. Fever
II. Polyarthritis	II. Arthralgia
III. Chorea	III. Prolonged P-R interval in electrocardiogram.
IV. Subcutaneous nodules	IV. Increased erythrocyte sedimentation rate, leukocytosis, C-reactive protein
V. Erythema marginatum	V. Preceding Beta-hemolytic streptococcal infection
	VI. Previous rheumatic fever or inactive rheumatic heart disease

or swelling of two or more joints. Arthralgia alone without objective evidence of joint involvement is not a major manifestation.

III. *Chorea.*—This must be differentiated from habit spasm, athetosis and cerebellar ataxia. Movements must be characteristic, involuntary and of moderate severity if chorea is to be used as a major manifestation.

IV. *Subcutaneous Nodules.*—Subcutaneous nodules are shot-like, hard bodies seen or felt over the extensor surface of certain joints, particularly elbows, knees and wrists, in the occipital region, or over the spinour processes of the thoracic and lumbar vertebrae.

V. *Erythema Marginatum.*—This recurrent, pink, characteristic rash of rheumatic fever in which the color gradually fades away from its sharp scalloped edge, is found mainly over the trunk, sometimes on the extremities, but not on the face. It is transient, is brought out by heat and migrates from place to place.

MINOR DIAGNOSTIC CRITERIA

I. *Fever.*—A significant rise in temperature is a common sympton, but, because it occurs in so many illnesses, it has little differential diagnostic value. In order to be included, the elevation in temperature must clearly exceed the normal diurnal fluctuation in which there is great individual variation.

II. *Arthralgia.*—Pain clearly located without objective findings is only a minor criterion for diagnosis. The pain must be in the joint, not in the muscles or other periarticular tissues, and must be distinguished from the nocturnal pain in the extremities occuring in normal children. Arthralgia must not be used as a minor criterion when polyarthritis is included as a major criterion.

III. *Prolonged P-R Interval in the Electrocardiogram.*—Prolongation of the P-R interval may be nonspecific; it is considered a minor criterion and is not diagnostic of carditis. It cannot be used if carditis is already included as a major manifestation.

IV. *Increased Erythrocyte Sedimentation Rate, Presence of C-reactive Protein, or Leukocytosis.*—Elevation in one or more of these nonspecific tests may be considered as a single minor criterion. Particularly to be deplored is the tendency to use any of these tests as a major criterion or as diagnostic of rheumatic fever. There are many other nonspecific tests, but these three are most commonly used.

V. *Evidence of Preceding Beta Hemolytic Streptococcal Infection.*—This must be documented by (1) a history of scarlet fever or by a typical clinical picture of other streptococcal infection preceding the onset of rheumatic fever by one week to one month, the nature of the infection being confirmed by a history of immediate contact with other individuals having typical streptococcal infection or by positive culture of the nose or throat in which beta hemolytic streptococcus predominated; or (2) an elevated or rising antistreptolysin-O titer.

VI. *Previous History of Rheumatic Fever or the Presence of Inactive Rheumatic Heart Disease.*—The existence of either of these may be used as a minor criterion to aid in deciding the rheumatic nature of the illness in question. For this use, the previous history must be documented by the same objective criteria as are set forth in this statement or by the presence of inactive rheumatic heart disease.

OTHER MANIFESTATIONS

Other manifestations include systemic manifestations such as loss of weight, easy fatigability, elevated sleeping pulse rate (tachycardia out of proportion to fever), malaise, sweating, pallor or anemia, and local manifestations such as apistaxis erythema nodosum, precordial pain, abdominal pain, headache and vomiting. These as well as a family history of rheumatic fever, provide additional evidence of the presence of rheumatic fever but are not to be included as diagnostic criteria.

There are combinations of these diagnostic criteria which occur in the presence of other illnesses which must be ruled out before a definitive diagnosis is made. One combination in particular—polyarthritis, fever and elevated sedimentation rate—is the weakest of all combinations of major and minor criteria. Diseases to be ruled out include rheumatoid arthritis, gonococcal arthritis, lupus erythematosus disseminatus, subacute bacterial endocarditis, nonspecific pericarditis with effusion, leukemia, sickle cell anemia, serum sickness (including manifestations of penicillin sensitivity), tuberculosis, poliomyelitis, undulant fever and septicemias, particularly meningococcemia.

1. A significant apical systolic murmur is long, filling most of systole; is heard best at the apex; is as well transmitted toward the axilla as over the precordium; and does not change with position or respiration. It must be differentiated from an innocent (functional) murmur which is frequently found in normal people. This innocent murmur is systolic, occasionally harsh, is heard best along the left sternal border and usually changes with position and respiration. Borderline systolic murmurs, intermediate in location and nature, occur and should be carefully watched. Questionable murmurs which are intermittently present or which, after a period of observation, cannot be clearly classified as significant are rarely of any import.

2. A significant organic apical systolic murmur is fre-

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quently accompanied by a low-pitched, short mid-diastolic murmur which is sharply localized to the chest wall over the apex of the heart and often heard best with a patient in the left lateral position with the breath held in expiration. This murmur, rarely present in the absence of an apical systolic murmur, confirms the significant nature of the latter. It must be differentiated from the long, low-pitched, crescendo apical presystolic murmur followed by an accentuated mitral first sound which is indicative of mitral stenosis but not of acute carditis.

3. The development of a basal diastolic murmur of aortic insufficiency is also indicative of carditis. It is an early, short, diminuendo murmur usually heard only or heard best along the left sternal border in deep expiration. It has great diagnostic value, even though it may be difficult to hear and present only intermittently.

BOOK REVIEWS

Handbook of Pediatrics, by Henry K. Silver, M.D., Associate Professor of Pediatrics, Yale University School of Medicine, New Haven, Connecticut; C. Henry Kempe, M.D., Assistant Professor of Pediatrics, University of California School of Medicine, San Francisco, California; and Henry B. Bruyn, M.D., Assistant Professor of Pediatrics and Medicine, University of California School of Medicine, San Francisco, California; Assistant Clinical Professor of Pediatrics, Stanford University Medical School, San Francisco, California. Lange Medical Publications, Los Altos, California. 1955. Price $3.00.

The contents, for purposes intended, are concise, easily found, well outlined and pertinent. It is the type of book which has been well organized as a useful ready table reference to the physician or a coat pocket reference for the medical student on pediatric outpatient. P. G. D.

The Practice of Dynamic Psychiatry, by Jules H. Masserman, M.D., Professor of Neurology and Psychiatry, Northwestern University, Chicago, Illinois. W. B. Saunders Company, Philadelphia. 1955. Price $12.00.

This is a monumental work of 700 pages of text and 45 of bibliography devoted to non-freudian analysis as a method of investigation and treatment in various fields of psychiatry. For the most part the analyses and deductions conform to the usual procedures and are acceptable and informative.

It is rather difficult from this work to assess the author's position with regard to the place of analyses in treatment. He evidently does not oppose physiologic methods, still 300 pages of the text are devoted to psychotherapy. In this connection it should be mentioned that some months ago appearing in the *Atlantic Monthly* a psychiatrist bemoaned the years he had spent on the details of analysis only to learn when he got out into practice that physiologic methods are much more effective and practical. This book taken by itself might lead to the same error.

Also one might question the value of psychologic tests and personality estimations on actively psychiatric patients. Still the work contains much material valuable in every branch of medicine and is recommended. L. B. A.

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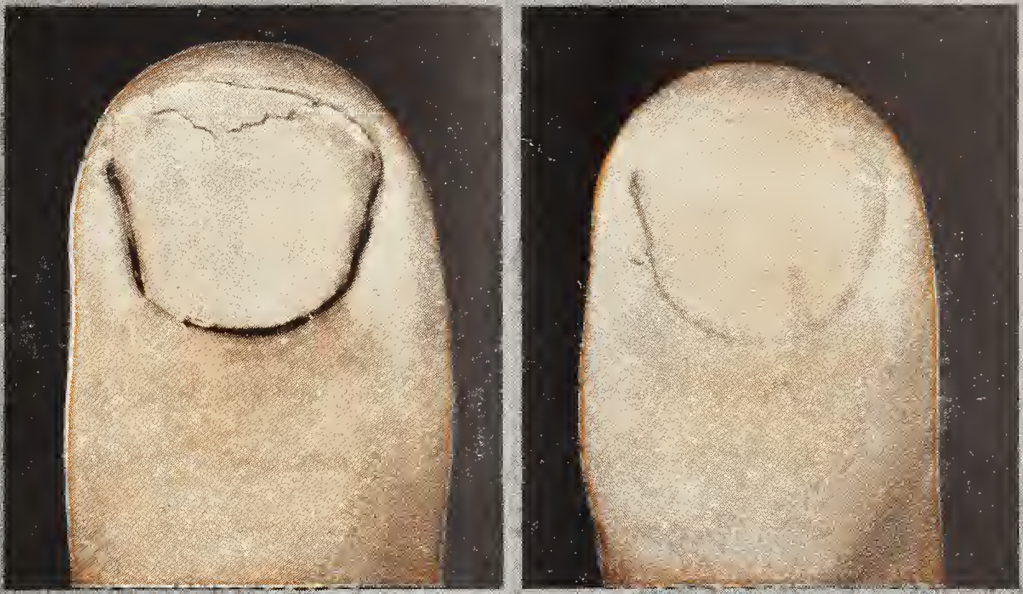

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1. Rosenberg, S. and Oster, K. A., "Gelatine in the Treatment of Brittle Nails," *Conn. State Med. J.* 19:171-179, March 1955.
2. Tyson, T. L., *J. Invest. Dermat.* 14:323, May 1950.

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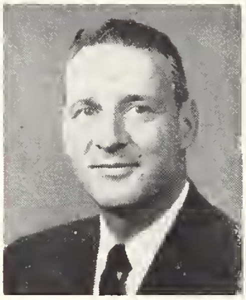
YOUR NAME AND ADDRESS

President's Page

Missouri Medicine, in the December and succeeding issues, will carry special articles on various legislative proposals now pending in the Congress. Congress will reconvene shortly after January 1, 1956.



The most important of these proposals is the Social Security Amendments contained in H. R. 7225 which include a proposal to provide cash benefits to certain Social Security beneficiaries who are permanently and totally disabled. This proposal would establish a system of national compulsory disability insurance for all persons over the age of 50.

This bill has been brought to your attention on several occasions in the last few months. Now that the hour is approaching when Congress will reconvene, it seems appropriate to again urge you to consider the bill and its future effect on the practice of medicine.

Can there be any doubt that the payment by the federal government of cash benefits for disabled persons will not lead to compulsory health insurance? Surely, the next step would be payment for partial disability. When those two things are secured, the next step is compulsory health insurance. Cash benefits for disability go hand in hand with compulsory health insurance.

You are urged to read the articles to appear in Missouri Medicine and by all means send your views to Senators Stuart Symington and Thomas C. Hennings, Jr., Senate Office Building, Washington, D. C.

. Which is today's most widely prescribed broad-spectrum antibiotic?

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EDITORIALS

Longevity at Record High

Expectation of life at birth reached an all time high of 69.8 years in 1954 among industrial policy holders of the Metropolitan Life Insurance Company, according to a report in that company's *Statistical Bulletin*. This represents a gain of almost a full year over the figure of 1953 and is the largest increase in any year since 1947.

In the decade of 1879 to 1889, the expectation of life at birth of industrial policy holders was only 34 years. Gradually reaching the present figure which more than doubles the life expectancy, in 1909 the expectancy was 46.3, in 1919 it was 51.1, in 1929 it was 55.8, in 1939 the figure was 62.5 and in 1949 it was 67.7, and since then has increased a few decimal points each year to the present 69.8.

Increases in expectation of life have always been greatest in the younger age groups and smallest for older persons and this is true of the 1954 figure. In the decade from 1944 to 1954 the increase for age 5 was 4.2 years as compared with 3.5 years at age 25 and 2.6 at age 45. In the last decade only 1.8 years have been added to the average life time of persons at age 65 who at present have a life expectancy of 14.1 years, the figure being 12.7 for males and 15.0 for females.

Each color and sex group, in the insurance experience reported, improved its longevity record of the last decade but not to the same extent. Among both white and Negro groups, females had somewhat greater gains than did males, as at age 5 the expectation of life increased by 4.2 years for white females compared with a rise of 3.3 years among white males.

Death rates in a broad range of ages have reached extremely low levels. It stands at less than two per 1,000 at ages 2 to 33 among white males and at ages 2 to 40 among white females. Experience in the Negro groups is not as favorable, the mortality rates for Negro females during the childbearing period, ages 25 to 31, being almost three to one for that of white females.

It is pointed out in the report that the group on which the study was made has made more rapid progress in reducing mortality and increasing longevity than has the general population of the United States, although at present it is quite similar. In 1909, the earliest year in which figures are available for comparison, this group showed about six years less life expectancy than that of the population as a whole while at present the figures are approximately the same.

While more gains will still be made through reductions in mortality from infectious diseases and accidents, it is pointed out that continuing gains in life expectancy will depend largely on achievements in controlling the cardiovascular-renal diseases and cancer, the present dominant diseases in the mortality outlook.

Why Optional?

Special safety features will be offered on 1956 model cars, so the large automobile manufacturers have announced. Largely the result of crash-injury research, these features are expected to reduce markedly the great number of fatalities and injuries daily occurring on our highways.

Among the safety features offered will be safety steering wheels, safety door latches, crash cushioning for instrument panels and sun visors, safety rear view mirrors and seat belts for both front and rear seats.

Most of the new safety features will be offered as optional accessories on 1956 model cars. After reaping millions of dollars profit in the accessories racket and loading their customers with unwanted gadgets during the post-war era, the automotive industry now has the audacity to offer safety features as optional equipment. Every future life lost on the highway without these protective features could henceforth be charged directly to the accessories racket.

How ridiculous it would be if certain safety features of today's modern surgery and anesthesia were offered patients at an optional fee, on a take it or leave it plan. Medicine would in all probability never live down the stigma of such a foolhardy offer. Is there any difference between a life saved on the highway and one saved in the operating room? The old adage relative to an ounce of prevention was never more true than here, particularly if one has ever witnessed the entry of macerated crash victims into a hospital.

All safety features of proven merit should be included as standard equipment on motor cars. The life thus saved may be that of your fellow passenger.

The automotive industry created this monster of the highway. Is it not their duty to corral it without resorting to the use of the accessory racket in doing so?

Martyn Schattyn, M.D.

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News

Personality problems were discussed by **Louis H. Forman**, M.D., Kansas City, at a luncheon meeting of the Kansas City Women's Chamber of Commerce on September 20.

Recently appointed a member of the medical advisory board of the Sears, Roebuck & Co. Foundation is **James R. McVay**, M.D., Kansas City.

Announcement was made on September 17 that Oliver Lowry, M.D., had been named dean of the Washington University School of Medicine. Dr. Lowry had been professor of pharmacology and head of that department since 1947. He succeeds **Carl V. Moore**, M.D., who resigned to devote full time to research and teaching.

Open house was held on September 12 in the National Guard Armory for friends and relatives of Dr. and Mrs. **D. I. L. Seabaugh**, Jackson, in honor of their fiftieth wedding anniversary.

"Guard Your Heart" was the subject of a talk given by **G. T. Carpenter**, M.D., St. Joseph, before a luncheon meeting of the Sertoma Club, on September 7.

The Mid-Continent Psychiatric Association at a meeting in Tulsa, Oklahoma, in September, elected **Frank J. Koenig**, M.D., and **Paul Hines**, M.D., Kansas City, editors of *The Bulletin.*

After sixty-one years as a practicing physician, **A. R. Timerman**, M.D., St. Joseph, closed his office on October 1. He expects to spend part of his time with a son in Florida.

The Adverettes Club in Kansas City had as their speaker on September 9, **Louis H. Forman**, M.D., who spoke on "Mental Health and the Woman."

A commendation from the Commandant of the Ninth Naval District was received by **Ralph E. Duncan**, M.D., who was commanding officer of the U.S.N.R. Medical Company 9-4 until his retirement as commanding officer. **Richard B. Schutz**, M.D., Kansas City, has been appointed to assume command.

Five citizens of Naples spent two days in Kansas City recently with **D. M. Nigro**, M.D., Kansas City, as their escort while there.

The Sturgeon Chamber of Commerce, at a meeting on September 12, were addressed by **Clarence Davis**, M.D., Columbia, discussing the purposes and facilities of the University of Missouri School of Medicine.

"What Medical Science Is Doing About Aging" was the subject of a talk presented by **Edward H. Hashinger**, M.D., Kansas City, at a recent convention of the American Association of Nursing Homes.

The Heart of America Tuberculosis Association, formed by the merging of the Kansas City Tuberculosis Society and the Clay County Tuberculosis Association, named **Lawrence E. Wood**, M.D., and **Harold Roberts**, M.D., Kansas City, members of the board.

The Kansas City Heart Association's rheumatic fever campaign was discussed before the Pharmaceutical Representatives Association of Greater Kansas City by **William L. Mundy**, M.D., Kansas City, on September 16.

A progress report on the medical center was given by **Roscoe L. Pullen**, M.D., Columbia, before the Columbia Rotary Club at a dinner meeting on September 15.

The medical advisory board of the Kansas City United Cerebral Palsy Association recently elected **Robert E. Bruner**, M.D., Kansas City, as chairman.

An award was presented **Wilbur P. McDonald**, M.D., St. Joseph, recently by the Buchanan County Tuberculosis Society in appreciation for his work with and counsel to the organization for the nine years he has served on the board.

Succeeding **Lewis M. Webb**, M.D., who served two years, **Clarence E. Mueller**, M.D., St. Louis, has been elected president of the medical staff of Deaconess Hospital, St. Louis. **Edward M. Cannon**, M.D., St. Louis, was elected vice president, and **Birkle Eck**, M.D., secretary-treasurer.

The inter-professional relationship between the druggist, doctor and patient was discussed by **Sidney W. Scorse**, M.D., Joplin, before the Jasper County Druggists Association in Webb City on September 14.

The American Diabetes Association has reappointed **William H. Olmsted**, M.D., St. Louis, vice chairman of the national committee on diabetes detection and education.

The medical profession was honored on October 5 on the occasion of the 1000th clinic to be televised in color for a medical audience by Smith, Kline & French Laboratories. **Carl R. Ferris**, M.D., Kansas City, after a presentation on liver biopsy before the Kansas City Southwest Clinical Conference received the award.

The organisms commonly involved in

Pyelitis

E. coli (8,000X)

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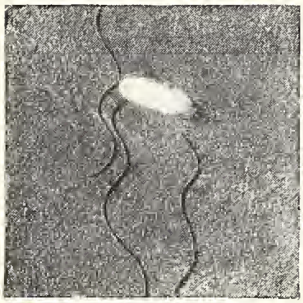
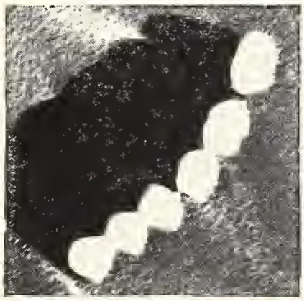

Salmonella paratyphi B (6,500X)

Strep. pyogenes (8,500X)

Strep. faecalis (10,000X)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The Clayton Rotary Club had as its speaker on October 4, **Robert Mueller**, M.D., St. Louis, who spoke on "Socialized Medicine." On October 25, **Curtis H. Lohr**, M.D., St. Louis, spoke on "Medical Aspects of Civil Defense."

"The Relationship of Christianity to the Student and Practitioner" was the subject of a talk presented by **C. Stuart Exon**, M.D., Jefferson City, at a meeting of the Columbia chapter of the Christian Medical Society in Columbia on September 23.

The Buchanan County Unit of the American Cancer Society recently elected **H. Sheffield Jeck, Jr.**, M.D., St. Joseph, president. Serving on the board are Drs. **Joseph O. Fisher, Thompson E. Potter, H. Ewing Wachter** and **Henry C. Willumsen**, St. Joseph.

Relationship between forensic medicine and law enforcement were discussed in an article by **Henry H. Sweets, Jr.**, M.D., Columbia, in an article in the September issue of the *F. B. I. Law Enforcement Bulletin* which is published by the Federal Bureau of Investigation.

"Recent Medical Developments" was presented over KFEQ, St. Joseph, on September 4 with **M. E. Grimes**, M.D., St. Joseph, moderator, and Drs. **J. F. Chiarottino, J. R. McDaniel, Caryl A. Potter, Jr.**, and **R. V. Riddell**, St. Joseph, serving as panelists. On October 2, the panel subject was "X-rays" with **Joseph L. Fisher**, M.D., St. Joseph, as moderator, and Drs. **Fred L. Nelson, W. B. O'Connor** and **Randal Weed**, St. Joseph, as panelists.

One month in-residence training in the fields of cardiovascular disease and pulmonary disease will be offered by the Department of Postgraduate Medical Education of the University of Kansas School of Medicine, the training in cardiovascular diseases being offered beginning November 1, March 1, April 1 and May 1, and training in pulmonary diseases beginning on November 1, January 2, April 1 and May 1.

The City of Chaffee celebrated its golden jubilee recently and **W. O. Finney**, M.D., was presented a trophy as Chaffee's outstanding citizen for his civic and professional contribution to the community. Dr. Finney has practiced medicine in Chaffee since 1910.

NEW MEMBERS

Barlow, Donal E., M.D., Frisco Bldg., Joplin. Jasper County.

Bordy, Marvin D., M.D., 109 Doctors Bldg., Kansas City. Jackson County.

Caffrey, Raymond J., M.D., 713 Main St., Grandview. Jackson County.

Calovich, Emery R., M.D., 618 Professional Bldg., Kansas City. Jackson County.

Chiles, David R., M.D., Smithville. Clay County.

Colom, George A., M.D., 425 E. 63rd St., Kansas City. Jackson County.

Horseman, Robert F., M.D., 248 Plaza Medical Bldg., Kansas City. Jackson County.

Parks, Stephen, M.D., Bloomfield. Semo County.

Patterson, Donald R., M.D., First National Bldg., Joplin. Jasper County.

Meriwether, Don R., M.D., 301 E. 51st St., Kansas City. Jackson County.

Meyers, Harold L., M.D., 308 Doctors Bldg., Kansas City. Jackson County.

Mitchell, Andrew D., M.D., 200 Plaza Times Bldg., Kansas City. Jackson County.

Moriarty, Lauren R., M.D., St. Mary's Hospital, Kansas City. Jackson County.

Wetzel, Fred S., M.D., 202 West Fourth, Carthage. Jasper County.

Witten, David M., M.D., 1300 Main St., Trenton. Grand River County.

Wooldridge, Bart F., M.D., 707 First National Bldg., Joplin. Jasper County.

DEATHS

Erni, Harry E., M.D., Macon, a graduate of the University of Kansas, 1932; member of the Chariton-Macon-Monroe-Randolph County Medical Society; aged 46; died August 23.

Sauer, William E., M.D., St. Louis, a graduate of Washington University School of Medicine, 1896; honor member of the St. Louis Medical Society; aged 80; died September 3.

Ellis, William W., M.D., Marceline, a graduate of the Keokuk Medical College, 1895; honor member of the Grand River Medical Society; aged 82; died September 3.

Ambrose, Olney A., M.D., St. Louis, a graduate of the Barnes Medical College, 1898; honor member of the St. Louis Medical Society; aged 80; died September 6.

Moenninghoff, Fritz J., M.D., Monett, a graduate of the Kansas City Medical College, 1905; honor member of the Ozarks Medical Society; aged 74; died September 7.

Atwood, William G., M.D., Carrollton, a graduate of Washington University School of Medicine, 1911; member of the Grand River Medical Society; aged 71; died September 14.

Senor, Samuel D., M.D., St. Joseph, a graduate of Northwestern Medical College, St. Joseph, 1889; honor member of the Buchanan County Medical Society; aged 89; died September 21.

Hopkins, Thomas A., M.D., St. Louis, a graduate of Missouri Medical College, 1894; honor member of the St. Louis Medical Society; aged 88; died September 23.

Herzog, Gustav G. A., Cuba, a graduate of the Beaumont Hospital Medical College, 1895; honor member of the Mid-Missouri Medical Society; aged 84; died September 28.

Bohan, Peter T., M.D., Kansas City, a graduate of Rush Medical College, 1900; honor member of the Jackson County Medical Society; aged 81; died October 2.

Conley, Dudley S., M.D., Columbia, a graduate of Columbia University College of Physicians and Surgeons, 1906; Past President of the Missouri State Medical Association; honor member of the Boone County Medical Society; aged 77; died October 4.

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BLUE SHIELD

Non-profit hospital-medical-surgical plans
sponsored by doctors

Kansas City
St. Louis

Missouri Medical Meetings

Clay County Medical Society Annual Clinical Conference, Elms Hotel, Excelsior Springs, Nov. 3, 1955.
Missouri Heart Association Postgraduate Course, Camdenton, Nov. 10-11, 1955.
American Public Health Association, Annual Meeting, Municipal Auditorium, Kansas City, Nov. 14-18.
Missouri State Medical Association, St. Louis, April 8-11, 1956.
St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.
Barton-Dade County Medical Society—third Wednesday of each month.
Benton County Medical Society—meets only on call.
Boone County Medical Society—first Tuesday of each month.
Buchanan County Medical Society—first Wednesday of each month.
Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.
Callaway County Medical Society—third Thursday of each month.
Cape Girardeau County Medical Society—first Monday of each month.
Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.
Clay County Medical Society—last Tuesday of each month.
Clinton County Medical Society—meets only on call.
Cole County Medical Society—first Monday of each month.
Cooper County Medical Society—first Monday after the 15th of each month.
Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.
Dunklin County Medical Society—first Tuesday of each month.
Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.
Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.
Greene County Medical Society—fourth Friday of each month.
Henry County Medical Society—meets only on call.
Holt County Medical Society—meets only on call.
Howard County Medical Society—meets only on call.
Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.
Jasper County Medical Society—second Tuesday of each month, September through May.
Jefferson County Medical Society—meets only on call.
Johnson County Medical Society—meets only on call.
Laclede County Medical Society—second Monday of each month at 6:00 p.m., at the Louise Wallace Hospital, Lebanon.
Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.
Lewis-Clark-Scotland County Medical Society—meets only on call.
Lincoln-St. Charles County Medical Society—third Thursday of each month.
Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p.m.
Miller County Medical Society—meets only on call.
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.
Moniteau County Medical Society—second Thursday of each month.
Newton County Medical Society—meets only on call.
Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.
North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.
Pemiscot County Medical Society—third Thursday of each month.
Perry County Medical Society—second Thursday of each month.
Pettis County Medical Society—third Monday each month September through May.
Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.
Pike County Medical Society—third Tuesday of each month.
Platte County Medical Society—meets only on call.
St. Louis County Medical Society—second and fourth Wednesday of each month.
St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.
Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.
South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.
Vernon-Cedar County Medical Society—meets only on call.
Webster County Medical Society—meets only on call.
West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

It was an enjoyable occasion to speak at a meeting of the Stoddard County Nurses Association on September 13 at Dexter. This session was held at the home of one of the nurses.

Of the twelve nurses present, only one or two were actively engaged in the profession. The others were busy taking care of housewife duties. Nevertheless, they were maintaining their interest in keeping up with developments in the entire health field.

Dr. Sewell was principal speaker at the Woman's Auxiliary board meeting.

They hold regularly scheduled meetings of their County Association and exhibit a keen interest in health problems. It would appear that, maybe, the so-called nurses' shortage is due to where their many husbands find employment or establish a business. Possibly, hospitals needing nurses might begin finding jobs in their localities for husbands of nurses. If athletes can be secured through similar means, why cannot nurses?

The Institute of Research at the University of Missouri has completed the Survey on Medical and Hospital Indigency in this state and has turned over its study report to the executive committee of the Missouri Health Council. The executive committee is now in the process of inviting a group of people on a statewide basis to serve as a special committee to study the entire report with the executive committee and to make recommendations toward solutions of medical and hospital indigency problems in Missouri as revealed through the survey.

On November 3 at the beautiful Elms Hotel in Excelsior Springs, the Clay County Medical Society will hold its Annual Clinical Conference. The program

The organisms commonly involved in

Pneumonia

D. pneumoniae (10,000X)

K. pneumoniae (6,500X)

Strep. pyogenes (8,500X)

Staph. aureus (9,000X)

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oral suspension (PANMYCIN Readimixed)
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*TRADEMARK, REG. U. S. PAT. OFF.—THE UPJOHN BRAND OF TETRACYCLINE

The Executive Board meeting was well attended

is listed elsewhere in this issue. All members of the State Medical Association are invited.

The Maternal Welfare Committee of the State Medical Association is anxious to appear on and provide programs for county medical societies relating to maternal mortality in Missouri. A meeting of this nature was held at Kennett, sponsored by the Dunklin County Medical Society, on September 27. The Kansas City and St. Louis Gynecology Societies are cooperating with the State Medical Association Committee on this project.

The Cape Girardeau County Medical Society again rang the bell in so successfully staging a 2nd Annual Southeast Missouri Cancer Conference. This was a full afternoon and evening session with a "heck of a lot" of cancer information passed around at Cape Girardeau on Thursday, October 6. More than one hundred doctors availed themselves of this program's enlightenment.

The Executive Board of the Woman's Auxiliary to the Missouri State Medical Association held its fall meeting at the Bothwell Hotel, Sedalia, on Tuesday and Wednesday, September 27 and 28. At the dinner on Tuesday evening, "almost everybody got into the act." Past presidents of the State Auxiliary were presented pins, and those present, received these pins with the appropriate "kiss on the cheek" from W. S. Sewell, M.D., chairman of the Council of the Missouri State Medical Association. In addition, Dr. Sewell was the principal speaker on the evening program. The present presidents of County Auxiliaries were also given pins significant of their office. The State Medical Association took the opportunity to present a corsage to each past president and county president in attendance. The greatest privilege afforded, however, was to yours truly with the pleasure of presenting the flowers to the recipients along with a replica of "Dr. Sewell's kiss." Mrs. Charles H. Shepherd of St. Louis County Auxiliary and president-elect of the State Auxiliary and her fashion show from the decades since 1920 was a top entertaining feature. Even parts of a few pages from the Auxiliary president's Mrs. Frank B. Leitz, "This Is Your Life," going back to her wedding day, were revealed.

Dinner preceded entertainment at the Board meeting.

In addition to the outstanding scientific program of the 33rd Annual Fall Clinical Conference of the Kansas City Southwest Clinical Society, October 3 to 6, the scientific exhibits deserve special commendation. They were definitely interesting, practical, attractive and informative. Also, anyone who attended the social event held at the Muehlebach Hotel, Tuesday evening, October 4, surely found a full evening's enjoyment. The fine food, floor show, dancing, social fellowship and splendid attendance left little in addition to be desired for such an evening's entertainment.

BOOK REVIEW

Handbook of Medical Treatment. Edited by Milton J. Chatton, A.B., M.D., Director of Medical Institutions, Santa Clara County, California; Superintendent of Santa Clara County Hospital, San Jose, Calif., Assistant Clinical Professor of Medicine, University of California School of Medicine, San Francisco; Sheldon Margen, M.A., M.D., Associate Research Biochemist, Department of Physiological Chemistry and Clinical Instructor in Medicine, University of California School of Medicine, San Francisco; and Henry D. Brainerd, A.B., M.D., William Watt Kerr Associate Professor of Clinical Medicine, University of California School of Medicine, San Francisco, Visiting Physician, Chief of Medical Service, San Francisco Hospital, San Francisco. Fourth Edition. Lange Medical Publications, Los Altos, California. 1954. Price $3.00.

Two internists and a biochemist are the editors of this book, which is a textbook of internal medicine in handbook size. Eight other contributors and the three editors have written the book.

The context throughout the book emphasizes treatment of diseases; a minimum of space is devoted to diagnosis.

The result is a collection in a small space of a wealth of therapeutic information. Although this arrangement will be of greatest usefulness to the student and house officer, it will also be in many respects of valuable assistance to the experienced practitioner.

The attempt to compress so much therapeutic management in to so small a space may be a fault of this volume. For example, pollen desensitization is covered in one half page.

If the doctor were to accept this schedule and employ it literally, it is probable that he would find himself in trouble before long. However, since the chief function of this book will be to serve as a guide in the management of emergencies, it can be recommended for general use. C. J. S.

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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Grand River Medical Society

The Grand River Medical Society met September 8 at the Strand Hotel, Chillicothe. There were twenty-seven members, eighteen Auxiliary members and nine guests present. About fifty enjoyed the fine dinner. After the guests were introduced, the Auxiliary retired to their meeting and the scientific program was presented.

The speaker, Dr. Clarence D. Davis, professor of obstetrics and gynecology, University of Missouri, Columbia, discussed "Amenorrhea." This was a fine and interesting paper followed by discussion and questions.

The application for membership of Dr. David M. Witten, Trenton, was presented with the unanimous approval of the Board of Censors, and he was elected to membership by unanimous vote. The president, Dr. John R. Dixon, welcomed Dr. Witten to the Society and wished him success.

The minutes of the last meeting were read and approved. There being no further business, the Society adjourned.

E. A. Duffy, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

W. F. FRANCKA, HANNIBAL, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

Dr. Michael L. Furcolow, chief of Kansas City Field Station, Public Health Service, Kansas City, Kansas, was the guest speaker on September 8 at the monthly meeting of the Chariton-Macon-Monroe-Randolph County Medical Society. Dr. Furcolow was accompanied by an assistant, Dr. Patrick Leham.

Dinner was served at the Woodland Hospital and following this, Dr. Furcolow discussed "Medical and Surgical Management of Pulmonary Histoplasmosis." Twenty-three doctors and guests were present at the meeting.

W. D. Chute, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

JOSEPH C. CREECH, TROY, COUNCILOR

Lincoln-St. Charles County Medical Society

A meeting of the Lincoln-St. Charles County Medical Society was held Thursday night, September 22, at the Southern Air, Wentzville.

A social hour preceded the dinner which was complimentary through the courtesy of Chas. Pfizer & Company, Inc. The scientific program for the evening was presented by Dr. R. O. Muether, St. Louis, who spoke on "Medical Emergencies." This was a most interesting and practical program.

Wm. H. Poggemeier, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

J. LOREN WASHBURN, VERSAILLES, COUNCILOR

Audrain County Medical Society

The Audrain County Medical Society held its regular meeting on September 19 in the cafeteria of the Audrain County Hospital, Mexico.

Drs. Sullivan and Coldwater were the speakers.

The meeting was held at the Audrain County Hospital.

Members thanked the speakers after the presentations.

The organisms commonly involved in

Bronchiectasis

Staph. aureus (9,000X)

Strep. pyogenes (8,500X)

Strep. viridans (9,000X)

Strep. faecalis (10,000X)

E. coli (8,000X)

K. pneumoniae (6,500X)

D. pneumoniae (10,000X)

H. influenzae (16,000X)

Aerobacter aerogenes (12,500X)

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The program of the evening was presented by Dr. James Sullivan, instructor in medicine, St. Louis University School of Medicine, who spoke on "The Medical Management of Peptic Ulcer," and Dr. K. B. Coldwater, formerly chief surgeon of the Veterans Hospital at Jefferson Barracks and John Cochran Veterans Hospital, who spoke on "The Surgical Management of Peptic Ulcer."

The application for membership of Ed S. Wallace, M.D., formerly of St. Louis and now located in Mexico, was presented to the society.

The Field Secretary of the Missouri State Medical Association attended the meeting.

There were seventeen physicians and guests present.

T. L. Dwyer, M.D., *Secretary*

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

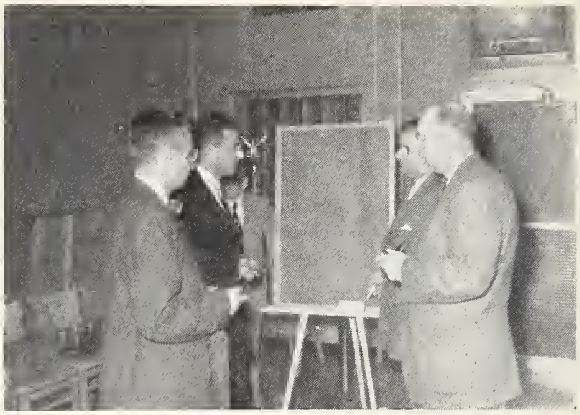
Henry, Johnson, Pettis, Saline and Adjacent County Medical Societies

Some forty doctors attended a joint dinner meeting of the Henry, Johnson, Pettis, Saline and adjacent County Medical Societies at the Pacific Cafe in Sedalia on September 21.

The evening festivities began with a social period, dinner and then the scientific program. The speaker for the evening was Hector W. Benoit, Jr., M.D., Kansas City, who discussed "The Management of Chest Injuries—Emergency and Otherwise."

Speaker and officers were seated at the speakers' table.

The meeting was well attended.



The speaker answered questions after his presentation.

This program was sponsored by the Missouri Academy of General Practice and members of the Academy attending were entitled to formal study credit toward Academy requirements.

The next joint meeting of the group, which will also include the doctors' wives, will be held at the same place in Sedalia on Wednesday night, November 16.

Ray Hollingsworth, M.D., *Chairman,*
Henry County Medical Society

West Central Medical Society

The West Central Medical Society held its first fall meeting in Harrisonville on September 8 with the doctors' wives also in attendance.

Following a social hour and a bountiful dinner, the doctors were privileged to hear a panel discussion on "Recent Advances in the Treatment of Rheumatic Fever," by a panel of three physicians from St. Louis University Medical School; namely, John W. Berry, M.D., Max Franklin, M.D., and C. G. Vournas, M.D., all of St. Louis.

A good attendance was present to hear this fine discussion on this subject of major importance.

A. L. Hansen, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Mid-Missouri Medical Society

The Mid-Missouri Medical Society and its ladies met at the Yellow Jacket Cafe, Lebanon, September 22, for dinner, followed by a scientific program.

Oral B. Crawford, M.D., Springfield, discussed "Recent Trends in Anesthesia," and answered questions arising from the discussion. This subject proved to be one of much interest to those in attendance at the meeting.

M. K. Underwood, M.D., *Secretary*

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. . . in hypertension

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In hypertension, Raudixin produces a gradual, sustained lowering of blood pressure. In addition, its mild bradycardic effect helps reduce the work load of the heart.

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- **Less likely to produce Parkinson-like symptoms**
- **Causes no liver dysfunction**
- **No serial blood counts necessary during maintenance therapy**
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Raudixin Tabs
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Disp. #100
Sig.: 1 tab. b.i.d.

*Ataractic, from ataraxia: calmness untroubled by mental or emotional excitation. (Use of term suggested by Dr. Howard Fabing at a recent meeting of the American Psychiatric Association.)

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TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Dunklin, Pemiscot, Butler-Ripley-Wayne and the Semo County Medical Societies

A joint dinner meeting of the Dunklin, Pemiscot, Butler-Ripley-Wayne and the Semo County Medical Societies was held Tuesday night, September 27, at the Cotton Boll Hotel, Kennett.

A social hour and dinner preceded the program for the evening which was furnished by the Missouri Academy of General Practice in cooperation with the Maternal Welfare Committee of the Missouri State Medical Association.

The subject for discussion was "The Major Causes of Maternal Mortality With Special Reference to Southeast Missouri." Those taking part in the discussion were A. C. Trueblood, Jr., M.D., James Pennoyer, M.D., and H. C. Wasserman, all of St. Louis and from the faculty of Washington University Medical School and C. D. Davis, M.D., Department of Obstetrics and Gynecology, Missouri University Medical School, Columbia.

A great deal of interest was shown by those present in this particular discussion.

E. L. Spence, M.D., *Secretary*

Butler-Ripley-Wayne County Medical Society

A dinner meeting of the Butler-Ripley-Wayne County Medical Society and wives of the doctors was held at the Hickory House in Poplar Bluff on Wednesday night, September 7.

Mr. Robert L. Scott, field representative of the Missouri Heart Association, discussed plans for the establishment of a cardiac clinic in Southeast Missouri. In addition to this discussion, two motion pictures were shown.

New members of the Society are Dr. Ernest M. Tapp, manager of the Poplar Bluff VA Hospital, and Dr. A. L. May of the Lucy Lee Hospital staff.

Dr. Charles D. Ottensmeyer, Van Buren, was a guest at the meeting.

J. R. Loughead, M.D., *Secretary*

Mineral Area County Medical Society

Norman L. Cook, Cape Girardeau, spoke before a meeting of the Mineral Area County Medical Society Thursday night, September 29, at the State Hospital in Farmington.

The subject was "The Selection of the Most Appropriate Anesthetic."

C. E. Carleton, Jr., M.D., *Secretary*

CLAY COUNTY CLINICAL CONFERENCE

The annual Clinical Conference of the Clay County Medical Society will be held at the Elms Hotel, Excelsior Springs, on November 3, with registration at 10:00 a.m., and the program beginning at a luncheon meeting at 12:15 p.m.

Program committee for the conference is F. M. Waterman, M.D., chairman, George E. Sanders, M.D., David E. Musgrave, M.D., Robert Hodge, and J. E. McCormick, M.D.

At the luncheon meeting, Roscoe L. Pullen, M.D., Columbia, dean of the School of Medicine of the University of Missouri, will speak on "The University of Missouri Medical School."

On the afternoon program, J. H. Randall, M.D., Iowa City, will speak on "Pelvic Endometriosis—Its Diagnosis and Treatment"; Robert L. Jackson, M.D., Columbia, will speak on "Common Pediatric Problems"; William M. McConahey, M.D., Rochester, Minn., will speak on "Radioiodine in the Diagnosis and Treatment of Hyperthyroidism"; and Victor B. Buhler, M.D., Kansas City, will discuss "Presentation of Pathological Specimens."

Following a social hour at 5:30 p.m., and dinner at 6:30 p.m., Paul M. Lindquist, M.D., regional medical officer, Federal Civil Defense Administration, will speak on "Highlights of Medical Civil Defense Planning and Requirements."

NURSE RECRUITMENT

The Missouri Committee on Careers sponsored a Nurse Recruiting Booth at the State Fair at Sedalia from August 20 through August 28. The Committee is made up of the following sponsoring organizations: Missouri Division of the American Cancer Society, Missouri Hospital Association, Missouri League for Nursing, Missouri State Nurses' Association, Woman's Auxiliary to the Missouri State Medical Association and the Missouri Division of Employment Security.

The exhibit for the booth "As a Career, Nursing Caps Them All," was rented from the National League headquarters. Fourteen schools of nursing sent students to recruit for their schools and the majority of schools sent literature and school caps. The Fair was well attended and it is estimated that several hundred visited the booth each day. It is felt that many parents and students were contacted at the booth that otherwise would have been missed in nurse recruitment programs at schools.

Thank you letters were mailed to more than twenty hospitals who participated in some form with the booth. The names of prospective students who indicated their choice of nursing schools in the daily registrar at the booth were included in the letters to the hospitals.

Without the able assistance and kindness of the Cole, Pettis, Lafayette-Ray and Saline County Medical Auxiliaries, and several members of the State Nurses' Association, the booth would not have accomplished its purpose.

The Missouri Committee on Careers is now working toward recruitment in other allied health fields.

Mrs. A. P. Stephan, Jefferson City, is state chairman on Nurse Recruitment for the Woman's Auxiliary to the Missouri State Medical Association.

ACCREDITATION PROGRAM FOR NURSING HOMES

The newly organized Missouri State Nursing and Allied Homes Association has announced that one of its main objectives is the setting up of standards and the promotion of a practical accreditation program for nursing homes.

Membership in this organization is accepted by classification of homes. Classification is based upon the type of service provided by the individual home. All homes classified as nursing homes must be under the direct supervision of a registered, professional nurse at all times and must provide adequate medical supervision.

The charter members of this organization have, for the past two years, been working toward this goal as a voluntary committee and have done considerable ground work. An advisory board of representatives from the Medical Association, the Hospital Association, the State Nurses' Association, Blue Cross, and the Division of Health and Welfare, as well as interested lay persons, has been set up to work with the organization's Committee on Standards of Accreditation. Mrs. Evelyn G. Stone, St. Louis, is chairman of this committee.

HEART CONFERENCE

Planned especially for the general practitioner, the Missouri Heart Association will hold a two day meeting November 10 and 11 at the Harwood Hotel, Camdenton, beginning at 1:00 p.m. on November 10.

The first session will deal with "Clinical Manifestations of Heart Failure," with Robert P. Ladenson, M.D., Columbia, presiding; greetings from the president, Earl Loyd, M.D., Jefferson City; and panelists will be F. Stanley Morest, M.D., Kansas City; Walter Baumgarten, M.D., St. Louis; Robert L. Jackson, M.D., Columbia, and John R. Smith, M.D., St. Louis.

"Treatment of Congestive Heart Failure" will be the panel at 9:00 a.m. on November 11, with A. M. Estes, M.D., Cape Girardeau, presiding, and the panelists will be Maxwell G. Berry, M.D., Kansas City; A. Graham Asher, M.D., Kansas City; J. Will Fleming, M.D., Moberly, and John R. Smith, M.D., St. Louis. Question and answer periods will follow the discussions both days.

Rev. Richard Trelease, Rector, St. Paul's Episcopal Church, Kansas City, will speak at a banquet on the evening of November 10, at which Don Carlos Peete, M.D., Kansas City, will preside.

BOOK REVIEW

THE MEDICAL SIGNIFICANCE OF ANXIETY, by Richard L. Jenkins, M.D., Chief, Psychiatric Research, Psychiatry and Neurology Service, Veterans Administration, Washington 25, D. C. The Biological Sciences Foundation, Ltd., Washington 7, D. C. Price $1.00.

This pamphlet discusses the emotional state of anxiety, its nature, significance and management in the average patient. Some good points are brought out that ordinarily are not emphasized as much as they deserve to be. L. B. A.

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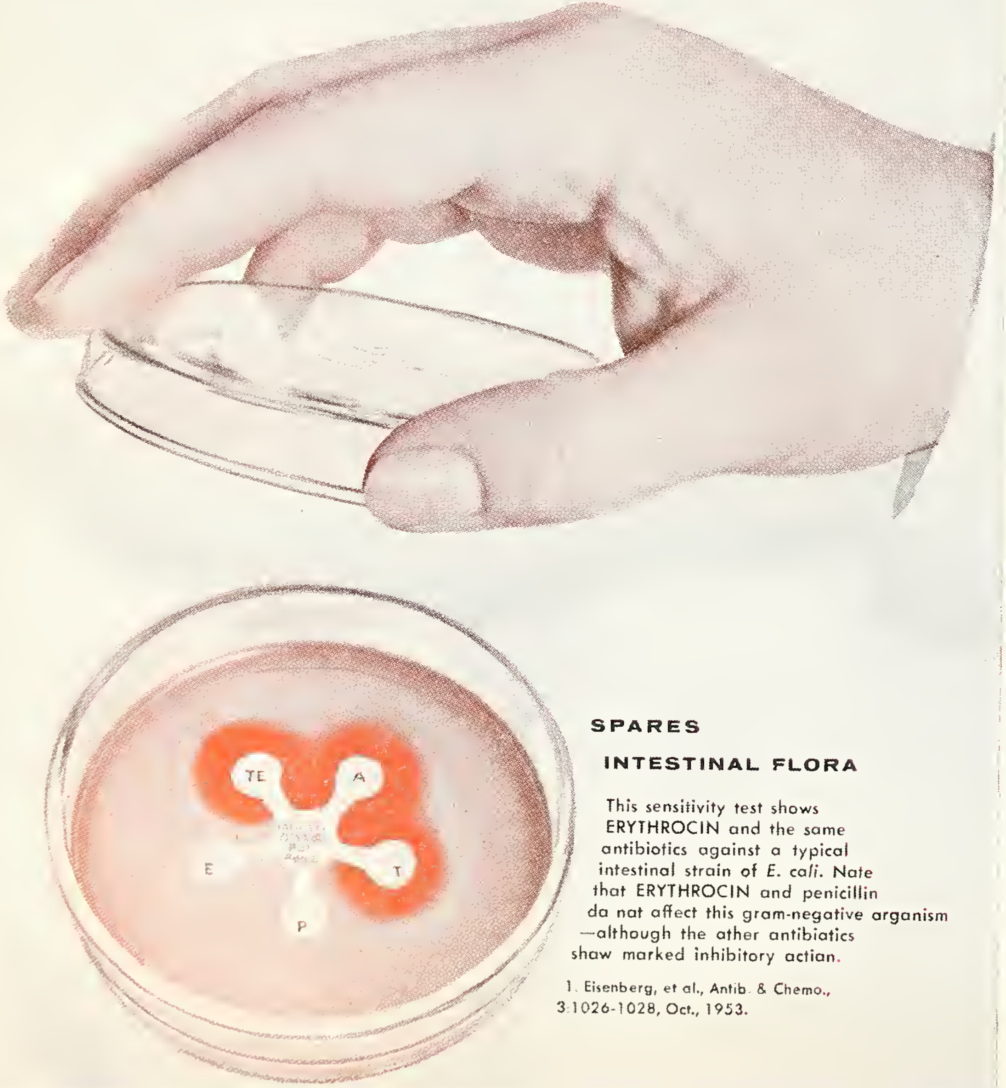

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1. Eisenberg, et al., Antib. & Chemo., 3:1026-1028, Oct., 1953.

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News From the Medical Schools

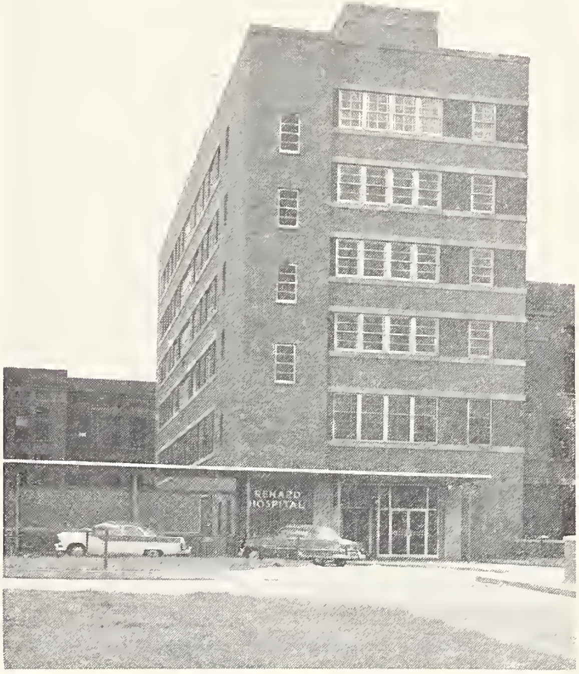
WASHINGTON UNIVERSITY

The new $1,580,000 Renard Hospital, the psychiatric unit of Washington University-Barnes Medical Center, was dedicated October 10 at the Medical Center. Presiding at the dedication were Chancellor Ethan A. H. Shepley, of Washington University, and Louis Renard, son of the late Mr. and Mrs. Wallace Renard who contributed funds for the construction of the hospital and for whom it is named.

A two day scientific symposium on "Newer Aspects of the Theory, Etiology and Treatment of the Psychoses," held October 10 and 11 in conjunction with the dedication, featured experts in psychiatry and allied fields from various parts of the country.

Construction of the new hospital was begun in 1952 with the aid of funds from the Hill-Burton Act which is administered in Missouri by the Department of Health and Welfare. The seven story building is located on Audubon avenue, about 500 feet east of Kingshighway Boulevard, immediately west of the Washington University Clinic Building.

The new 100 bed Renard Hospital has facilities for private, semi-private and ward patients on the third, fourth, fifty and sixth floors; loading docks, a receiving room and mechanical equipment comprise the ground floor; and the first and second floors house administrative offices, clinical practice quarters for the department of psychiatry and neurology and the division of psychosomatic medicine and basic and clinical research laboratories for psychiatry and neurology. There also are facilities for occupational therapy and a sun deck for patients.



The New Renard Hospital.

The trustees of Barnes Hospital, who operate all hospitals in the medical center except the St. Louis Children's Hospital, also service the new Renard Hospital. This service includes operating rooms, laboratory tests, anesthetics, nursing, food, laundry, pharmacy, house staff and other hospital services.

A grant of $30,000 has been awarded by the Josiah Macy, Jr., Foundation, New York, to the department of anatomy in support of research by Dr. Jack Davies, associate professor of anatomy. He will carry out studies of gestation on the passage of materials from the mother to the fetus. This will include chemical determinations of the rate of transfer of various materials and studies of the structure of the placenta, using the high magnification of the electron microscope. The grant will cover a three year period.

Dr. Manuel Payno, president of the First Pan-American Congress of Gerontology to be held in September, 1956, in Mexico City, was in St. Louis recently to discuss plans for the Congress with Dr. Edmund V. Cowdry, director of the Wernse Laboratory of Cancer Research at Washington University School of Medicine. Dr. Cowdry is chairman of the North American Committee of Cooperation for the Congress. Dr. William B. Kountz, assistant professor of clinical medicine at the Medical School, is a member of this group.

This Congress marks an important advance in the study of the problems of aging in our part of the world, according to Dr. Cowdry, as it will be the first meeting entirely for experts on gerontology from all parts of the Western Hemisphere. Such study, Dr. Cowdry said, is of great importance now as life expectancy continues to rise rapidly. Dr. Cowdry, president of the International Association of Gerontology in 1951, will be one of six honorary presidents at the Mexico City Congress.

In addition to the Congress Dr. Payno is president of the Mexican Academy of Gerontology and the Mexican Society of Gerontology.

Dr. Eric Horning, of the Chester Beatty Research Institute, London, discussed "Some Anomalies in Endocrine Carcinogenesis" September 6 at the Medical School. The lecture was sponsored by the department of pathology. Dr. Horning is a former fellow in anatomy at the Medical School.

SAINT LOUIS UNIVERSITY

Dr. R. Walter Schlesinger has been appointed Professor of Microbiology and Director of the Department at the Saint Louis University School of Medicine and will assume his duties November 1. Dr. Schlesinger comes to the University from the Public Health Institute of the City of New York, Inc., where he has been an Associate Member in the Division of Infectious Diseases for the last eight years. He received his M.D. degree from the University of Basel Medical School in Switzerland in 1937. Dr. Schlesinger was a Fellow, then Assistant in Pathology and Bacteriology at the Rockefeller Institute for Medical Research, New York, from 1940 to 1946. He was a Captain assigned to the Army Epidemiological Board as a member of the Commission on Neurotropic Virus Diseases from 1944 to 1946. He also served a temporary appointment as

Consultant to the Secretary of War on mission to the Far East area for Army Epidemiological Board in 1946.

Thirteen other faculty members were added to the teaching staff of the School of Medicine September 1. They are: Dr. Mary A. Davis, assistant in pediatrics; Dr. Marvin G. Fingerhood, assistant in internal medicine; Dr. Margaret H. Hanlon, instructor in pediatrics; Dr. Robert Gresick, assistant in pathology; Dr. James L. Hickey, assistant in pathology; Dr. Bryon J. McGinnis, assistant in internal medicine; Dr. Alfred W. Richardson, associate professor of physiology; Dr. John J. Riley, assistant in internal medicine; Dr. Herbert Siesener, assistant in internal medicine; Dr. James F. Sullivan, instructor in internal medicine; Dr. James Ransdell, assistant in pathology; Dr. Edgar S. Wallace, assistant in otolaryngology and Dr. Benjamin T. Williams, Jr., assistant in pathology.

Dr. Daniel L. Sexton, associate clinical professor of medicine, Saint Louis University School of Medicine, was awarded the 1955 Mississippi Valley Medical Society Service Award for unusual and distinguished service to the medical profession at the 20th Annual Meeting of the M.V.M.S. which met in Saint Louis September 28 to 30. Dr. Sexton, president of the Saint Louis Medical Society, and one of the past presidents of the M.V.M.S. was presented the award at the group's annual banquet held at the Jefferson Hotel, Thursday night, September 29. Recipients of 1955 Awards of Fellowship in the M.V.M.S. in recognition of high qualifications, personal and professional and of established professional standing were: Dr. Charles R. Doyle, assistant professor of clinical surgery, and Dr. Alphonse McMahon, associate professor of internal medicine, and chief of staff at St. John's Hospital. Dr. Martin W. Davis, instructor in internal medicine, won second prize in the M.V.M.S. Essay Contest. His paper was titled "The Dizzy Patient." Dr. Sexton extended an address of welcome at the general assembly opening the meeting September 28. Faculty members represented on the three day scientific program included: Dr. Joseph M. Krebs, senior instructor in gynecology and obstetrics, Panel on Obstetrics; Dr. Maurice B. Roche, assistant clinical professor of orthopedic surgery, clinical demonstration "Fractures"; Dr. W. H. White, Jr., senior instructor in obstetrics and gynecology, clinical demonstration "Use of Forceps"; Dr. Robert V. Brennan, assistant in urology, clinical demonstration "Emergency Relief of Urinary Retention"; Dr. Robert E. Ryan, instructor in otolaryngology, scientific exhibit on Treatment of Vascular Headache"; Dr. Bertrand D. Coughlin, instructor in surgery, clinical demonstration "Practical Office Proctology"; Dr. Grayson Carroll, associate professor of clinical urology, panel on "Diseases of the Aged" and Dr. Don C. Weir, associate professor of clinical radiology, "Panel on G-I Tract Bleeding."

Dr. James W. Colbert, Jr., acted as moderator at the morning panel of a Symposium on "Modern Trends in Therapy" held at the Chase Hotel October 9. The program was under the joint auspices of the St. Louis Chapter of the Missouri Academy of General Practice, Lederle Laboratories, St. Louis University School of

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Medicine and the Washington University School of Medicine.

Philip A. Conrath, associate professor of medical illustration and director of the department, presided over the tenth annual meeting of the Association of Medical Illustrators held at the Barbizon Hotel in New York October 1 to 5. Professor Conrath, who is retiring president of the group spoke at the annual banquet on October 4. The title of his talk was "The Association of Medical Illustrators in Retrospect and in Prospect."

Dr. Alfred W. Richardson, associate professor in physiology, attended a Symposium on "Physiologic Effects of Micro-Wave Radiation on Living Tissues" at the Mayo Clinic September 23 and 24.

UNIVERSITY OF MISSOURI

OPENING OF FOUR YEAR MEDICAL SCHOOL

Autumn has returned to Columbia. Simultaneously, the students have also arrived and the University of Missouri once again begins its familiar routine. For the School of Medicine, however, there is something memorable about this particular fall: for the first time in many years, the University of Missouri School of Medicine is teaching third year students. The junior class numbers twenty-five while there are forty-five students in the beginning class and forty-three in the second year. Clinical instruction for third year students is progressing satisfactorily and all concerned are enthusiastic about the reestablishment of a third year curriculum. The University Hospitals of the Parker, Noyes, and Student Health Service Buildings have been converted to teaching facilities, both in-patient and out-patient, for the current academic year, pending the completion of the new University of Missouri Medical Center in 1956.

GIFTS AND GRANTS

Gifts and grants to the University of Missouri School of Medicine for the present fiscal year beginning July 1, 1955, now total over sixty-eight thousand dollars. These donations and grants are distributed as follows: Dr. Lloyd E. Thomas, Associate Professor of Biochemistry, has received a grant from the Department of Health, Education and Welfare in the amount of $6,388 for studies on "Localization of the Structural Lipoproteins of Cells"; Dr. William A. Sodeman, Professor of Medicine, has received a grant from the Department of Health, Education, and Welfare in the amount of $15,000 for the purposes of augmenting the undergraduate program in Psychiatry; Dr. B. A. Westfall, Professor of Pharmacology, and Drs. D. K. Meyer and W. S. Platner, Professors of Physiology, have received a renewal of a grant from the Department of Health, Education and Welfare in the amount of $7,454 for a project in the Department of Physiology and Pharmacology entitled "Glycogen Fractions of the Anoxic Heart"; Dr. Walter J. Burdette, Professor of Surgery, has received a grant from the American Cancer Society, Inc., in the amount of $8,316 for research on "Effect of Pupation Hormone on Mammalian Tumors"; Dr. William A. Sodeman, Professor of Medicine, has received a renewal of a grant in the amount of $25,000 from the National Heart Institute for augmentation of undergraduate cardiovascular teaching; and Dr. Hugh E. Stephenson, Jr., Assistant Professor of Surgery, will continue to receive a grant of $6,000 from the John and Mary R. Markle Foundation as a Markle Scholar in Medical Science.

APPOINTMENTS AND PROMOTIONS

In addition to the students, there are other new faces on the School of Medicine campus this fall. Dr. Homer B. Latimer, formerly Chairman of the Department of Anatomy at the University of Kansas, became Visiting Professor of Anatomy on September 1. Dr. Latimer, a native of Rock Creek, Ohio, received his degrees from the University of Minnesota, and has done graduate work at the University of Berlin and the University of Missouri.

Miss Bobbie L. Bradfield, formerly associated with St. Luke's Hospital in Kansas City, became Assistant Professor of Nursing on September 12.

Dr. Owen J. Koeppe, formerly associated with the University of Minnesota, became Assistant Professor of Biochemistry as of September 1. Dr. Koeppe is a native of Cedar Grove, Wisconsin.

Dr. Arthur W. Merrick, formerly associated with the Department of Physiology at the University of Kansas, became Assistant Professor of Physiology as of September 1. Dr. Merrick is a native of Great Falls, Montana.

Mrs. Katherine Mason, Assistant Director of the School of Nursing, has been promoted to Associate Professor of Nursing and Assistant Director of the School of Nursing.

Dr. Frederic E. Simpson, formerly of San Angelo, Texas, became Instructor in Pediatrics as of July 1.

Dr. James Atkins, a practicing physician of Columbia, Missouri, became Instructor in Pathology as of September 1.

New Appointments as Clinical Associates include Dr. Gordon C. Sauer, practicing in Kansas City, as Clinical Associate in Medicine (Dermatology); Dr. Roland Ladenson, practicing in Columbia, Missouri, as Clinical Associate in Medicine; and Dr. A. B. Lewis, practicing in Columbia, as Clinical Associate in Pediatrics. All appointments were effective September 1.

Mrs. Verna Rhodes has joined the faculty of the School of Nursing as Instructor in Nursing effective June 13.

New Assistant Instructors include Dr. Alonso Patino, a native of Colombia, South America, as Assistant Instructor in the Department of Surgery; and Dr. Edward C. Hanisch, Jr., a native of Nebraska, as Assistant Instructor in Obstetrics and Gynecology. Dr. Patino took up his duties as of July 1, 1955, and Dr. Hanisch as of October 1, 1955.

POSTGRADUATE ACTIVITIES

Dr. Bertis A. Westfall, Professor of Pharmacology, and Dr. R. L. Russell, Assistant Professor of Pharmacology, attended a symposium on the teaching of Pharmacology at the regular fall meeting of the American Society for Pharmacology and Experimental Therapeutics at the University of Iowa School of Medicine in Iowa City, early in September. During the five days occupied by the meeting, an audience of approximately four hundred persons also attended a symposium on graduate teaching in Pharmacology and a panel discussion entitled "Chemical Bonding and the Molecular Structure of Drug Interaction."

Dr. Robert L. Jackson, Professor of Pediatrics, was guest lecturer on September 9 at a gathering co-sponsored by the Virginia Council of Health and Medical Care, and the Food and Nutrition Council of the American Medical Association, held at the Medical College of Virginia at Richmond. Dr. Jackson spoke before an audience of more than three hundred on the topic of "Weight Reduction Including Use of Special Products."

On September 12, Dr. Clarence D. Davis, Professor and Chairman of the Department of Obstetrics and Gynecology, apprised the Sturgeon Chamber of Commerce on the developments of the University of Missouri School of Medicine. On September 8, Doctor Davis also lectured before the Grand River Medical Society in Chillicothe on "Amenorrhea."

On September 15, Dean Roscoe L. Pullen apprised the Rotary Club of Columbia on the developments of the University of Missouri School of Medicine and the University Hospitals and gave a similar address to the Rotary Club of Fulton on Wednesday, September 21, using slides and movies to illustrate his talks. On September 27, Dean Pullen attended the meeting of the Franklin-Gasconade-Warren County Medical Society in Washington, Missouri, speaking on the progress of Missouri University Medical School and University Hospitals.

Dr. Victor J. Cabelli, Assistant Professor of Microbiology, has returned from Los Angeles where he visited the Departments of Bacteriology and Infectious Diseases at the University of California, and discussed with the members of the staff problems in research and teaching. He also inspected the new laboratories and teaching facilities in these departments. While in San Fernando, Dr. Cabelli visited the Microbiological Research Laboratories at the Veterans Hospital and discussed problems in tuberculosis research. During August, Dr. Herbert Goldberg, Assistant Professor of Microbiology, visited colleagues at the Laboratories of New York University, College of Dentistry; and the University of Maryland, Department of Bacteriology. Dr. Robert Keller, also of the Department of Microbiology, visited the Laboratories of the University of Pennsylvania School of Medicine during August. He consulted and discussed current teaching and research problems with the faculty at that institution. Dr. Keller also visited during that period the physical plants of the University of Toronto and McGill University.

On August 25, Dr. William A. Sodeman, Professor and Chairman of the Department of Medicine, addressed the Rotary Club of Columbia on the subject "Chronic Illness." Mrs. Katherine Mason and Mrs. Fern C. Stuber of the School of Nursing met with Professional nurses to discuss the planning for nursing service in rural hospitals: safe and effective nursing care. The meeting was sponsored by the 7th District of the Missouri State Nurses' Association and was held at the Ellis Fischel State Cancer Hospital, Columbia, Missouri, on September 8.

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Tuberculosis Abstract

Tuberculosis—1955. Is Hospital Care Necessary?

The rapidly changing pattern of treatment of tuberculosis, especially since the announcement of isoniazid early in 1952, has made it increasingly important to "keep up" in this field. Questions have arisen regarding the need for hospital care, the duration of such care and the intelligent handling of antimicrobial drug therapy. For these reasons it has seemed desirable for the Ohio Department of Health to present the best informed opinion available at this time.

(1) How have drugs influenced the duration of hospital care? Drug therapy has shortened both the average duration of hospital care and duration of bed rest for patients with early active disease. It has lengthened the period of hospital care for a significantly large group of patients, who would otherwise die early, but now are kept alive as chronic cases for a long time, with drug therapy.

(2) Is hospital care necessary for all active cases or will home treatment suffice for many such patients? If there are insufficient beds available, home treatment using anti-TB drugs is obviously the next best procedure. Rather dramatic early improvement is often seen in active TB treated at home with anti-TB drugs, but some such cases suffer "spread" of disease and may lose their chances for recovery.

Recently, James J. Waring, M.D., a former president of the National Tuberculosis Association, acknowledging the disadvantages of TB hospital care, such as expense, separation from family, and restrictions of hospital living, pointed out the serious deficiencies of home care in tuberculosis: Members of the family and the public are frequently exposed unnecessarily to tubercle bacilli. The patient at home seldom obtains an understanding of his disease and the attitude toward its long term treatment which will lead him to protect his health long after active treatment has been stopped. This "education" which comes from the staff and other patients in the TB hospital is usually not accomplished when the patient is treated at home. Systematic rest at home is difficult to attain without supervision. In the hospital, rest is a prime consideration. The early weeks of drug therapy are often complicated by symptoms requiring changes in regimen, insistence on regular administration and moral support by the staff. At home the drugs prescribed may be omitted or taken irregularly with the result that early drug resistance develops. Toxicities of drugs in use and complications may go unrecognized for long periods when the patient is at home. In the hospital such incidents are handled safely and promptly. The increased importance of surgery in tuberculosis makes it essential that the strategic moment for intervention not be missed. Recent experience indicates that many patients treated at home are not being considered for surgery at any time. The technical facilities of laboratory and x-ray often provide crucial information determining the course of therapy. Such aids are often inadequately provided in home treatment but the hospital patient usually has access to the necessary services. Altogether, it is seen that while home treatment of tuberculosis may, at times, be successful, there are many hazards associated with it.

After viewing the problem of rest and exercise, the Committee on Therapy of the American Trudeau Society recently said, "The Committee on Therapy points out again that, from the facts now available, there is no evidence to support a reduction in the amount of rest therapy from that of past practices except as it may be justified by an earlier attainment of an inactive status of the disease. . . . The patient should be hospitalized, if at all possible, throughout the infectious stage of his disease. In addition to the benefits of hospitalization to the patient, this is sound public health practice to prevent the spread of tuberculosis. . . . The total period of disability, though greatly shortened, on the average, with antimicrobial therapy, must still be estimated at a minimum of one year, even in mild cases which respond favorably to treatment."

When there were insufficient beds for the care of tuberculosis patients, there may have been some justification for individual cases remaining at home. Now that beds are available, a special obligation falls on the health departments and practicing physicians to see that "active cases" and potentially "infectious cases" are in hospital beds.

Public health officers and practicing physicians are in a strong position in insisting that every case of active tuberculosis have a period of treatment in a tuberculosis hospital. This period will be variable in length but must continue until the patient is not a hazard to his associates and until all therapeutic factors have been utilized to the patient's maximum benefit. The Ohio Department of Health recommends that all health departments and practicing physicians take a firm stand to the end that the process of tuberculosis control be accelerated to its maximum.

By the National Tuberculosis Association.
By Ralph E. Dwork, M.D., M.P.H., *The Ohio State Medical Journal,* May, 1955.

Prevalence of Tuberculosis in Large Cities

Although there is considerable optimism regarding tuberculosis as a result of the introduction of new chemotherapeutic agents and the rapidly falling death rate, physicians close to the tuberculosis problem believe this may not be entirely warranted. There is good reason to believe that the prevalence (total number of cases of tuberculosis in the community) may actually be increasing.

One reason for the increasing prevalence of tuberculosis lies in the survival rate of numerous patients currently treated, as compared with the prechemotherapeutic era. Prior to 1946, most large tuberculosis institutions reported an annual death rate of about 30 per cent of the number of yearly admissions. The current rate in most of these institutions is under 10 per cent. As survivors return to community life from the sanatorium, some inevitably undergo a relapse, and infect other persons, possibly with tubercle bacilli already resistant to antituberculosis drugs.

A second factor that contributes to an increase in the number of tuberculosis patients living at home can be attributed to the outpatient programs. This type of program varies considerably from city to city.

Editorial, *The Journal of the American Medical Association,* February 5, 1955.

In New York, treatment is administered to patients who have left sanatoriums against medical advice, as well as to those who refuse to enter sanatoriums. Many of these patients have negative sputum. On the debit side, however, it is probable that many of these patients will relapse and many will refuse to undergo effective surgery. In the Chicago program, recalcitrant patients are untreated; only postsanatorium patients selected for early discharge are given outpatient treatment. The relapse rate for these selected cases has been reported as being very low.

A third factor that contributes to an increase in the number of tuberculosis patients at home is due to enthusiastic publicity on the efficacy of antituberculosis drugs. Many newly discovered tuberculosis patients are encouraged by this publicity to refuse sanatorium care and many sanatorium patients leave before treatment has been completed. Survivors who formerly would have died, patients with surgical collapse, a large number of "good chronics" who are clinically well but bacteriologically positive, and numerous recalcitrant, inadequately treated patients present a threat to effective tuberculosis control.

Effective management of increased prevalence of tuberculosis in a community requires improved supervision of patients residing at home, improved liaison between sanatoriums and outpatient clinics, and greater restriction of tuberculosis "public health menace" patients. While great strides have been made recently in tuberculosis therapy, what still remains to be accomplished should not be minimized in this most prevalent of all infectious diseases.

Missouri Medicine in Review

(Continued from page 844)

Dr. E. E. Glenn, Springfield, was elected president of the Missouri Chapter of the American Trudeau Society which met in St. Louis, September 21. Dr. H. L. Mantz, Kansas City, was elected president-elect, and Dr. D. L. Coffman, Leeds, was elected secretary-treasurer.

Dr. Robert Elman, St. Louis, has been given the Samuel D. Gross award for pioneer work in the use of amino acids through injection, which has saved the lives of thousands of war starved victims in Europe. The $1,500 award is made by the Philadelphia Academy of Surgery every five years for an original contribution to surgical research or practices.

Major Samuel S. Kirkland, Springfield, has been promoted from Major to Lieutenant Colonel.

Lt. Col. Leslie D. Cassidy, St. Louis, has been decorated with the Legion of Merit for outstanding services as chief medical officer of the 70th General Hospital in North Africa and Italy.

Lt. Col. Franklin E. Walton, St. Louis, Chief, Surgical Service, Hines General Hospital, has been promoted to Colonel.

Colonel Howard A. Rusk, St. Louis, has been appointed consultant on Physical Rehabilitation for the Baruch Committee.

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MISSOURI MEDICINE

The Journal of the Missouri State Medical Association

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Curiosa et Trivia

William B. McCunniff, M.D.

Time for a suture-it-yourself and cast-it-yourself course? An estimated 600,000 home handymen are injured per year—most as a result of ladders, power tools and hand tools.

Alcoholism, currently rated as the number four health problem in the U. S., is 50 per cent more prevalent than cancer and 225 per cent more prevalent than polio.

Vermifuge wasn't the answer! There are 18,000,000 cases of pinworm infestation in the U. S. and Canada alone . . . an estimated 209,000,000 in the world.

Of current U. S. production of 231 tons of penicillin per year, about 40 per cent is exported or used on animals. A measly ¾ billion doses is left for home consumption—or four doses per average American per year.

Ponce de Leon was about 500 years too early—about 700,000,000 doses of estrogen per year are given from our latter day Fountain of Youth.

A study of 300 practicing physicians over the age of 40 in New York showed definite objective evidence of heart disease in well over one third.

Less than ten years after the first atomic explosion, a radioiosotope, I^{131}, has been admitted to the U. S. Pharmacopoeia.

Seven out of every 2,000 Americans are in prolonged care mental hospitals. The cost of hospitalizing these patients ranges from $1 to $4 per day in public hospitals to $10 in private hospitals. V.A. hospitals manage on about $7 per day per patient.

Surprising that any American could hurt; especially if he has gotten his share of the fifteen tons of aspirin consumed per day in this country.

In 1520, an escaped cabin boy of Narvaez' fleet, Juan Nepomucen, fled into Mexico ill with smallpox. It is estimated that about three million persons died in the ensuing epidemic.

Some of the requirements (about a century ago) for a good wet nurse: modesty, pleasant disposition, excellent physical condition, wide hips, good-looks, and good complexion. In general, brunettes were preferred to blondes; redheads were not recommended because their milk was said to be too acrid.

Roslyn, Washington, citizen William Lumsden lost his left arm in a tractor accident in 1930. But in contrast to the history notation "past and family history not pertinent," it might be mentioned that his father, his grandfather, and his great-grandfather had lost their left arms in accidents.

One blood transfusion every fifteen seconds is needed in the United States.

Capsule Clinics

Irving A. Wien, M.D.

- Thoracolumbar sympathectomy is a palliative and not a curative type of therapy for essential hypertension. However, there is no known surgical or medical therapy which is curative for this disease. Advances in Medicine and Surgery, Graduate School of Medicine, University of Pennsylvania, W. B. Saunders Co., Philadelphia, 1952.

- About one man in every seven at the ages of 60 and over is hospitalized in the course of one year, and the most common surgical reason for this is prostectomy. Statistical Bulletin, Metropolitan Life Insurance Co. 36 (May) 1955.

- Whiplash injuries of the neck result from hyperextension and are largely due to rear end automobile collisions. The basic cause for symptoms and findings is soft tissue injury and nerve root irritation. James, O. E., and Hamel, H. A.: Missouri Medicine 52 (June) 1955.

- Eventration of the diaphragm is a condition in which one hemidiaphragm or a portion of a hemidiaphragm lies at an abnormally high level in the thorax. It is of congenital origin in the majority of cases. Neuman, H. W., and Ellis, F. H.: Proc. Staff Meet. Mayo Clin. **30** (July 13) 1955.

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Woman's Auxiliary

Mrs. Frank B. Leitz, *President*

When Dr. Walter B. Martin, as president of the American Medical Association, spoke to delegates to the 1955 convention of the Woman's Auxiliary to the American Medical Association he said in part, "*Today's Health* was a pretty sick baby, but the Auxiliary resuscitated him, and I really believe he's going to grow up. He still needs a little more nourishment."

According to our National *Today's Health* chairman, Mrs. C. Rodney Stoltz, Watertown, South Dakota, the period September to December 10, is the time for some force feeding. "Operation Christmas was so successful last year that we'll give our Baby that same shot in the arm this year. But we've got a huskier youngster this year and he's got to have more than the 9,000 gift subscriptions we had for dosage last year. Remember the slogan? 'Every Auxiliary Member give a Christmas Gift Subscription.' "

Is it out of order, I wonder, for members of the Auxiliary to suggest that members of the Medical Societies help us to help them? During a visit to a county auxiliary during the last few days we heard a report that a doctor gives subscriptions to *Today's Health* to pharmaceutical representatives who call on him during the year. How about patients who read medical gossipings in newspapers and current popular magazines? Might it actually be helpful to you if these patients were provided with subscriptions to *Today's Health* where they are assured of reading authentic medical information?

For your convenience in placing subscriptions to *Today's Health,* here is a list of our state and county auxiliary *Today's Health* chairmen. Where we do not have the name of the chairman, we have listed the name of the county auxiliary president:

State Chairman: Mrs. W. E. Koppenbrink, Jr., 1604 Walnut, Higginsville.

Audrain: Mrs. Ben Jolly, 1215 N. Washington, Mexico.

Boone: Mrs. E. L. Washington, 608 W. Broadway, Columbia.

Buchanan: Mrs. C. S. Grant, 7 Lindenwood Lane, St. Joseph.

Butler-Ripley-Wayne: Mrs. R. C. Engelhardt, 1322 Meadow Lane, Poplar Bluff.

Cape Girardeau: Mrs. W. O. Seabaugh, 23 N. West End Blvd., Cape Girardeau.

Clay: Mrs. E. H. Fischer, 4000 Indianola Dr., Kansas City 16.

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Cooper: Mrs. W. C. Allen, Glasgow.

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Franklin-Gasconade-Warren: Mrs. Ben Eisenmann, New Haven.

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Greene: Mrs. M. D. Bonebrake, 1476 University, Springfield.

Jackson: Mrs. Robert Butcher, 8236 Tracy, Kansas City.

Jasper: Mrs. Eugene H. Hamilton, 615 N. Pearl, Joplin.

Jefferson: Mrs. Hart Donnell, Crystal City.

Johnson: Mrs. Keith Jones, 910 East Clark, Warrensburg.

Lafayette-Ray: Mrs. Hugh Brady, Concordia.

Marion-Ralls-Shelby: Mrs. J. W. Well, Palmyra.

Mid-Missouri: Mrs. James M. Myers, 1016 W. 12th, Rolla.

Miller-Moniteau-Morgan: Mrs. R. Fulks, California.

Mineral Area: Mrs. C. E. Carleton, Jr., 20 Trimfoot Terrace, Farmington.

Nodaway-Atchison-Gentry-Worth: Mrs. Benjamin F. Byland, Maryville.

Ozark: Mrs. A. P. Capetti, Aurora.

Perry: Mrs. William F. Utterman, 614 S. Main, Perryville.

Pettis: Mrs. C. H. Brady, 720 West 5th, Sedalia.

St. Louis City: Mrs. Francis Weinel, 333 Oakwood, St. Louis 19.

St. Louis County: Mrs. Leroy E. Ellison, 7346 Myrtle Avenue, Maplewood 17.

Saline: Mrs. Richard F. Aiken, 110 N. Brunswick, Marshall.

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SAINT LOUIS
KANSAS CITY

Missouri Medicine in Review

Leo H. Pollock, M.D.

FORTY YEARS AGO

A letter to the *Missouri State Journal,* by Joseph Goldberger, Surgeon, and G. A. Wheeler, Assistant Surgeon, United States Public Health Service, describes "an interesting experiment planned to test the possibility of producing pellagra in the healthy human, white, adult male, by a restricted, one sided, mainly carbohydrate (cereal) diet. The experiment was carried out at the farm of the Mississippi State Penitentiary, about eight miles east of Jackson, Mississippi. Dr. A. G. McLaurin, the prison physician, informs us that there is no history of the occurrence or presence of pellagra on this farm. There were twelve who, accepting the pardon made them by Gov. Brewer and with the assurance of proper care and treatment should such be needed, volunteered to submit themselves to the experiment. On July 1, 1915, one of the volunteers was released because of the development of a prostatitis. Of the eleven volunteers, not less than six developed symptoms, including a 'typical' dermatitis, justifying a diagnosis of pellagra. The nervous and gastrointestinal symptoms were mild but distinct. The dermatitis was first noted between September 12 and September 24, 1915, or not later than five months after the beginning of the restricted diet. It is of great interest to note that in all our cases the skin lesions were first recognized on the scrotum. Later there appeared lesions on the backs of the hands in two cases and the back of the neck in one case. This experience would suggest that the scrotal lesion is a much more common early skin manifestation than has heretofore been believed. No person in the 'camp' not of the volunteer squad has presented evidence justifying even a suspicion of pellegra."

At the regular meeting of the Benton County Medical Society held in Warsaw, in Dr. Dillon's office, Dr. H. G. Savage suggested that in the future all meetings be held in the Public Hall in place of a private office.

The Buchanan County Medical Society appointed the following committee to get in touch with the public health and legislation committee for the purpose of calling on the newspapers and suppressing quack advertisements: Drs. F. H. Ladd, Charles Geiger and C. R. Woodson.

At the Cass County Medical Society, Dr. Amos T. Fisher read a paper on "Unnecessary Necessities." It was an excellent paper, largely on the causes of insanity and interesting and instructive to those who were fortunate enough to hear it.

The Clay County Society met at the Snapp Hotel in Excelsior Springs. Dr. Spence Redman of Platte City, our esteemed councilor, opened the scientific program with a paper on "Why We Lose So Many Cases of Appendicitis." The reasons for the untoward results, the doctor summoned up as follows: 1. Failure to obtain consent for early operation. 2. Operating at inopportune stages. 3. Cases in the neighborhood that apparently recovered without operation used as argument for delay. The doctor based his experience on some 200 personal cases in country practice. The paper brought out much harmonious discussion.

The Wright County Medical Society met at Mountain Grove. This being the annual meeting, the following officers were elected for 1916: president, Dr. R. A. Ryan, Norwood; vice president, Dr. J. A. Fuson, Mansfield. Dr. James R. Davis of Noble, Ozark County, drove thirty-five miles to be present at this meeting. The meeting was the means of getting three old-time physicians of the Ozarks together, namely, Drs. Daugherty, Hubbard and Davis; all three are the same age, 62. Dr. Daugherty and Dr. Hubbard had never met Dr. Davis, although they have practiced in the hills here for from twenty-five to thirty-five years and were members of the society. Dr. Davis says he is coming back.

TWENTY-FIVE YEARS AGO

Dr. Morris Fishbein, editor of the *Journal of the American Medical Association,* Dr. H. S. Warren and Dr. Sidney A. Portis, also of Chicago, and Dr. E. H. Cary, Dallas, Texas, accompanied by their wives, passed through St. Louis in September on their way to Denver, Colorado. On the way to Kansas City where they were to be the guests of Dr. and Mrs. W. W. Duke, they met with an accident about forty miles east of Kansas City on Highway 40 which resulted in the serious injury of Dr. and Mrs. Fishbein and minor bruises to Dr. Cary. They were taken to the Trinity Lutheran Hospital in Kansas City and placed under the care of Dr. Jabez N. Jackson. Dr. and Mrs. Fishbein have fully recovered.

Dr. Eldon M. Findley, Graham, Missouri, was appointed instructor in physiology at the school of medicine of the University of Missouri.

The title of a new journal will be the *American Journal of Clinical Pathology* and the first number will appear in January, 1931. Dr. T. B. Magath of

(Continued on page 983)

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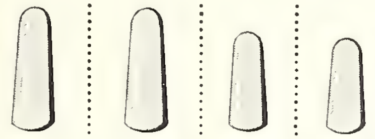

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Prepayment Plans

Health Insurance Statistics

Some interesting facts may be gained by a study of national Blue Shield statistics and the annual report of the Health Insurance Council.

These disclose that 86 million persons had surgical expense protection by the end of 1954. Of these, more than 32 million persons held membership in Blue Shield plans. Nearly two out of every three men, women and children in the United States now are protected by voluntary health insurance. Of these, Blue Shield alone covers almost 21 per cent of the population.

The total benefit payments for the year 1954, as reported by the Council, amounted to more than $2.7 billion. Of this total more than half covered hospitalization expenses.

During the first six months of 1955, Blue Shield plans in Missouri paid physicians $3,994,000.00 for services rendered. The national total during the same period paid out by all Blue Shield plans for medical and surgical care was $164,716,000.00. A total of 733,000 people belong to the Missouri Blue Shield plans as of June 30, 1955, or approximately one out of every six persons in the state.

Kansas City Blue Cross-Blue Shield

The Kansas City Area Hospital Association, representing a new concept of teamwork by physicians, lay trustees of hospitals and administrators, now has in motion a program of orderly planning and cooperation to help hospitals avoid mistakes while expanding to meet the area's needs.

The association's structure was developed carefully to insure that needed teamwork in an area where twenty-nine hospitals are members and the population is about 1,200,000.

It has seven lay trustees from hospital boards, five administrators of hospitals and three physicians on its board of directors. That assures a forum of the viewpoints of three groups vital to operation of hospitals.

Russell W. Kerr, M.D., Kansas City, is vice president of the board of directors. Arch E. Spelman, M.D., Smithville, is chairman of the medical staff council. Mahlon H. Delp, M.D., University of Kansas School of Medicine, is a medical trustee.

The association selected Miss Susan S. Jenkins as executive director. Miss Jenkins was part time executive secretary of the former hospital council for eleven years. She was assistant to the director of the Kansas City Blue Cross-Blue Shield plans for about thirteen years.

Hospitals in Kansas City, Kansas City, Kansas, Lexington, Independence, Smithville, Excelsior Springs, Harrisonville, Warrensburg and St. Joseph in Missouri, and Olathe and Leavenworth in Kansas are members of the association. Blue Cross-Blue Shield also is a member.

The Kansas City Blue Cross-Blue Shield plans held their ninth open enrollment period between November 6 and November 20 in the thirty western Missouri and two eastern Kansas counties which they serve.

During the two weeks anyone, regardless of age or job status, could apply for this protection, effective January 1. The need for occasional open enrollment periods was noted more than five years ago and in the first such period, in January 1950, more than 19,000 persons unable to enroll through groups, obtained this protection.

In eight open periods held so far, the protection was extended to 72,491 persons. Hospitals and doctors throughout the area cooperate in spreading the word about the open enrollment periods.

In the open enrollment last May, one of the 8,448 persons who enrolled was a 96 year old man living at suburban Merriam, Kansas. He had known little illness in his long life, still mowed his steeply sloping lawn and otherwise looked after his home. But he did not qualify as the oldest member of the Kansas City plans. A man, 101, who enrolled in the first nongroup campaign in January 1950, was admitted in October to the Independence Sanitarium and Hospital.

As of August 31, the Kansas City Blue Cross plan covered 440,409 persons, with the Blue Shield coverage standing at the 402,791 mark.

Work on the new building, at Thirty-seventh Street and Broadway, in Kansas City, to provide vitally needed space at the lowest possible cost for Blue Cross-Blue Shield offices, is on schedule. The plans hope to move into the building about May 1.

During November all county units of the Missouri Farm Bureau Federation were open for enrollment of their members in Blue Cross-Blue Shield.

The High Protein Diet fits any budget!

Getting enough high-quality protein in your patient's diet doesn't require an unlimited budget. Meat, of course, is an outstanding source, but it can easily be reinforced with other protein foods.

Mix a protein bonus in the main dishes—

Your patient can add skim milk powder along with the seasonings in meat loaf—then hide hard-cooked eggs inside for a bright-eyed surprise.

A fluffy omelet folded over penny-sliced frankfurters, ground cooked meat, flaked fish or cheese is both tempting and economical.

And a green salad topped generously with shoestrings of meat and cheese carries its weight in protein.

Then add more to the rest of the meal—

Cottage cheese is happily versatile. It tops any salad—fruit, vegetable, flaked fish. Makes a pleasing spread, too, especially on dark breads. Thinned with milk and mixed with chili sauce, it's a zesty salad dressing. Or a good amount can be whipped into mashed potatoes.

An egg white whipped into fruit juice makes a frothy flip. Or you might suggest gelatin instead.

And a fruit-cheese dessert is a gourmet's delight. Pears go with blue cheese, apples with Camembert, orange sections with cream or cottage cheese.

Of course, not all protein foods supply all the amino acids. But with sufficient variety, the diet is likely to supply all the essential ones, and at the same time assure adequate amounts of the vitamins necessary for proper protein metabolism.

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Missouri State Board of Medical Examiners

Duff S. Allen, M.D., *President*

A Few Thoughts About Substandard Methods of Practice

"The price of liberty is eternal vigilance." This might be paraphrased to read, "The Price of the Best Medical Care Is Eternal Vigilance." And you, the physicians of our state, are the vigilantes.

This has been true of medicine for at least 5,000 years. The first known physician was Sekhet'-Enach. He lived about 3,000 B.C. It is safe to say that after he had set up his medicine tent, another man set up another tent further down the valley and claimed that by rubbing this or that spot of the patient's body or by a different incanation or a different type of poultice he could get better results than did Sekhet. As we come down the years of medical history there was Mesmerism, for example, a frank out and out fake treatment, in which the patient sat with his feet in a special type of water until his funds ran out or until the "doctor" Mesmer got tired of his being around and an electric shock, coming through the seat of the chair, acted as a signal to inform the sick man that he had been cured. And so it has been and is.

The main stem of medical knowledge itself was not very tall in those early years. It is surprising, however, how much Hippocrates knew about the phenomenon of disease. He lived about the year 460 B.C. and even then he knew the importance of symptoms; he divorced medicine from superstition; he instituted the objective type of investigative procedure, and proved that disease was the result of natural phenomena. Hippocrates studied the etiology of many diseases and appreciated the value of rest combined with therapeutic measures. Roger Bacon in the 13th century had a clear idea of original research but he lacked the means to pursue it.

Paracelsus, who was born two years before America was discovered, introduced the use of chemicals in the treatment of disease. He used mercury, lead, sulphur, iron, arsenic, copper sulphate and opium. He popularized tinctures and alcoholic extracts.

The greatest strides in medicine, however, have come within the last fifty years. The immense amount of research which has been done in our medical schools and in our fine hospitals has resulted in lengthening the average life expectancy from 43 years in 1900 to 68 years for men and 70 years for women in 1955. We have almost wiped out a score of our most serious diseases. Diphtheria, which once killed so many of our children, has been robbed of its terror. Polio, scarlet fever, pneumonia, small pox, typhoid fever, tetanus and a host of other less lethal diseases have been brought under control during the lifetime of many of us.

In spite of all this splendid progress in medicine, we still are encircled by a conglomerous mass of cultists who offer treatments, many of which have been tried and found wanting centuries and centuries ago and none of which can compare to our antibiotics, vaccines, serums, hormones and other modern drugs.

We have in our state today naturopaths, naturatics, electro therapists, physio therapists and other therapists, who do not understand the etiology of the symptoms which they treat. Many of these cultists dispense medicine illegally.

One of our incorporated universities advertises in its 1955 fall term short courses ranging from six week to two years in Vitaminology, Physio-physical therapy, Body and Facial therapy, Psychosomatic, Iridology, Mental and Spiritual therapy. In this same incorporated university courses are offered to those who can qualify in Homeopathy, Naturopathy, and Naturatics. These courses lead to a full degree.

Are we helpless and unable to cope with these situations? Not at all. Our laws set out the fact that only those who are licensed to practice medicine may do so and we have had a recent opinion by the Attorney-General defining that which constitutes the practice of medicine in the State of Missouri. It includes diagnosis of disease as well as treatment.

Your State Board of Medical Examiners has not been inactive. It is our duty to see to it that no one practices medicine in the State of Missouri who is not licensed to do so. Currently we have nine suits or investigations of those whom we have reason to suspect of illegal practice.

You are the Vigilantes. Let's keep our medicine on the highest level.

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 52 December, 1955 Number 12

Dyclonine Hydrochloride

Evaluation of a New Topical Anesthetic in Minor Urologic Technics

HARRY E. FISHER, M.D., *St. Louis*

IT WOULD SEEM that the ideal topical anesthetic to use in minor urologic technics should have the following properties: (1) an agent which is self sterilizing in low concentration, (2) low index of sensitizing potentiality, (3) nontoxic even if absorbed or introduced into the general circulation, (4) high index of anesthesia comparable with that of cocaine, (5) rapid onset of anesthesia, (6) nonirritating to mucous membrane, and (7) no alteration in drugs used in association with it.

None of the topical anesthetics in common use today possess all of these properties. Perhaps an ideal anesthetic will never be developed. Nevertheless, search should continue for agents which come as close as possible to this criteria. The benefits of developing such an agent both to the patient and the examining physician are great.

Recently, a new drug was developed which possessed local anesthetic properties. This drug structurally departs from the usual ester or amide linkage. It is 4-n-butoxy-B-9 (1-piperidyl) propiophenone HCl.*

Dyclonine has no measurable parasympatholitic action as found by Abreu et al.[1] This is not the case when other local agents were used. This drug was found to be bactericidal and fungicidal in concentrations ranging from 0.006 per cent for Staphlococcus aureus to 0.2 per cent for monilia. Profft,[2] Florestano and Baylor[3] found it to have a stronger bactericidal action *in vitro* than phenol and chlorobutanal. Therefore, this anesthetic may be considered self sterilizing unless massively contaminated.

Abreu, Richards and Burch[4] reported animal response to intravenous injections of the drug. Clinical trials were carried out[5] to study its antitremor properties in the cerebral palsy patient and the aged with Parkinsonism. During these trials intravenous doses were given to adults, the doses ranging between 200 and 500 milligrams given over a five minute period. Side effects became manifest only at the higher dosage levels. These were nausea, vomiting, vertigo and confusion but all were transient and no measurable cardiovascular changes occurred. In addition, oral doses up to 1,200 milligrams per day were tolerated by adults for one to three weeks without side effects. Regularly spaced blood counts, urine analyses and liver function tests were conducted and demonstrated no alterations.

Shelmire, Gastineau and Shields[6] investigated the dermatologic aspects of this drug on a wide range of diseases in which pruritus or irritation was a chief complaint. Of 200 cases, only two developed increasing erythema and pruritus after three and four months use and skin tests indicated that sensitivity had developed.

In view of the results obtained while using this anesthetic agent in other fields and because of the potency of anesthesia as measured by Richards et al[7] by the rabbit cornea technic, the Urology Clinic became interested in evaluating its application to minor urologic technics.

METHOD AND RESULTS

Concentrations of 0.5 per cent solution of Dyclonine were used. Volumes from 2 to 10 cc. were instilled with a blunt nose syringe into the urethra prior to instrumentation for varying periods of time ranging from one to twenty minutes. The tests were carried out on all patients presenting themselves to the Urology Clinic without selection of cases. The anesthetic was randomly interchanged with sterile water or with the standard local anesthetic which has been routinely used in the clinic. There were thirteen different examiners using and recording their impression of the effi-

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* Trade Name, Dyclonine, Pitman Moore Company.

cacy and side effects observed. None of the observers knew whether they were using the usual anesthetic, sterile water or Dyclonine. At the termination of the examination each examiner would record the amount, time elapsed from instillation to instrumentation, results, side reactions and type of procedures used. Results were tabulated as excellent, good, fair and poor. Procedures most commonly carried out included urethral dilatations and cystourethroscopy in both male and female.

The average amount of solution used was 6 cc. for an average period of five minutes. The comparative percentage as rated by the examiners is tabulated in table 1. A total of 284 patients were studied, 126 with the usual anesthetic, 108 with Dyclonine and fifty with sterile water. The only side reactions recorded were pain and burning at the site of application. There were fifty such cases with water, four with Dyclonine and three with the usually employed anesthetic. No systemic reactions were encountered.

Effectiveness of anesthesia as observed is summarized in table 1.

TABLE 1

	Excellent PER CENT	*Good* PER CENT	*Fair* PER CENT	*Poor* PER CENT
Dyclonine	40.7	53.7	2.8	2.8
Control Anesthetic	18.2	61.9	12.7	7.2
Sterile Water	2.0	76.0	8.0	14.0

DISCUSSION

It is realized that at best such a trial is extremely difficult to evaluate. Factors which are variable seem to be the variation in gentleness of technic, presence or absence of acute inflammation, the suggestability of the patient as well as his pain tolerance, the technical difficulty presented by any given patient, the purely subjective evaluation of effect on the part of the examiner and the suspicion in the examiner's mind that he is using one agent or another.

It is noteworthy that the total of "good" and "excellent" results was definitely higher with Dyclonine than those obtained with either the standard anesthetic used or with sterile water, while the poor results were definitely less with the newer anesthetic agent. Application of the Chi square test revealed this difference to be significant. Also, the side reactions with all three were minor, consisting of burning or pain. The frequency of these was greatest using sterile water and was essentially the same with two topical anesthetics.

Perhaps the most surprising feature of this comparative study was the frequency of reports that the use of sterile water produced good anesthetic results. This finding may once again emphasize the profound importance of gentleness of manipulation of urethral instruments.

Although minor urologic procedures may be carried out without the use of topical anesthesia, providing assiduous gentleness is employed, the selection of such cases is difficult and the reassurance to the patients supplied by the use of a topical anesthetic agent is sufficiently great to warrant the conclusion that the routine use of such a procedure in all minor urologic procedures involving instrumentation is necessary. Dyclonine meets practically all of the criteria set forth in the beginning of this paper. It was found that the anesthesia obtained was significantly superior to the popularly used standard anesthetic previously employed in this clinic. From this experience, and from prior animal and human studies, its use would seem to be safe. However, a much larger series must be observed before a final conclusion can be reached on this point. Certainly, all precautions observed with other topical anesthetics, such as avoidance of forceful instillation, and the avoidance of use immediately after urethral instrumentation, should be employed.

SUMMARY

A comparative study of Dyclonine, usual anesthetic and sterile water has been made. It is believed that Dyclonine has proved to be an excellent anesthetic for topical urethral anesthesia.

600 S. Kingshighway

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Hotel Jefferson, St. Louis
April 8, 9, 10, 11, 1956

Dunlop's Traction in Supracondylar Fractures of the Elbow

VILRAY P. BLAIR, JR., M.D., *St. Louis*

Extension type supracondylar fractures with marked displacement of the humerus or those complicated by "T" comminution into the joint are difficult to reduce and maintain in satisfactory position. The standard method of manipulation and maintenance of reduction in hyperflexion (Jones' position) does not always produce a satisfactory reduction and many times aggravates the potential vascular insufficiency. The two important aspects of this type of fracture to be kept in mind are: (1) maintenance of adequate blood supply to the forearm and hand in order to avoid the complication of Volkmann's ischemia, and (2) the maintenance of excellent reduction, as even children may not remodel deformities in this area. Good function depends on anatomic position of the fragments, particularly correction of rotation. Dunlop's traction is an ideal method for solving these problems. It almost invariably reduces the fragments. In addition to this, it allows the elbow to be treated in moderate extension which is the optimum position for maintaining adequate circulation to the extremity in a swollen, injured elbow. Because Dunlop's traction has not been popularized sufficiently, the primary purpose of this article is to point out its many advantages and its few disadvantages.

This method, of course, does not apply to all supracondylar fractures, but was essentially devised for the extension type fracture of the distal humerus when there is anterior angulation or posterior displacement of the distal fragment or fragments. Its application to a flexion type fracture would only further increase the deformity. As the extension type fracture is more frequently seen in children, it is most commonly used in this group. However, it may be applied with great success in adults as well. In certain cases of severely comminuted fractures, the traction can be applied while the elbow is still swollen and the circulation is somewhat endangered. During this period some or all of the comminuted fragments will be reduced. After a period of two weeks, if the entire reduction is not satisfactory, then an open reduction can be performed on the elbow when the circulatory status is satisfactory. The technical difficulty of operating through markedly edematous and hemorrhagic tissue is obviated and the problem of comminution is greatly reduced. It is also a satisfactory method of reducing posterior displacement of the lower humeral epiphysis. The traction is usually applied without a general anesthetic. Novocain may be injected into the hematoma, making the procedure entirely painless. Hyaluronidase may also be used. One disadvantage in the use of this method is that hospitalization is necessary for a period of two to three weeks. But in the severe fractures, it is often wise to observe the patient in the hospital so that more radical steps may be taken if Volkmann's ischemia seems inevitable. It is the opinion of many that in this type of fracture, the patient should be hospitalized routinely for that reason. This method of treatment does not particularly apply to undisplaced or minimally displaced extension type supracondylar fractures as gentle manipulation and application of a posterior splint is usually satisfactory.

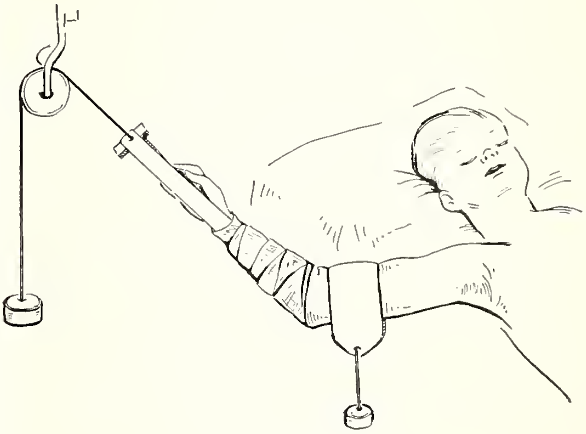

Fig. 1

APPLICATION OF DUNLOP'S TRACTION

It is unnecessary to mention in detail the routine supportive measures to be taken when a patient is admitted to the hospital, but adequate sedation is imperative. If the fracture is compounded, adequate debridement and closure of the wound should be performed as soon as possible. The forearm is shaved if necessary and adhesive strips are then carefully applied over the volar and dorsal aspects of the forearm from just below the elbow past the wrist and out over the hand, in the same manner that Buck's extension is applied to the leg. It is important that the tape be applied to the volar and dorsal surfaces of the forearm as this produces the correct rotation of the forearm to correct the usual varus deformity of the distal fragments that accompanies this type of injury. It is applied with the patient in the supine position with the injured side of the body extremely close to the edge of the bed. The forearm, elbow and arm should then be wrapped with an elastic bandage to prevent further swelling and subsequent formation of fracture blisters.

Direct traction is applied in the axis of the arm by means of a rope and weight attached to the adhesive strips. The shoulder is in 90 degree abduction so that the direction of pull is perpendicular to the side of the bed. A pulley should be hung higher than the bed and approximately a foot distal to the fingers of the extended arm. A saddle of felt, the width of which is half the length of the upper arm is covered with stockinette, is applied hanging from the upper arm close to the elbow with a weight tied to the ends. The amount of weight to be applied to the adhesive strips and to the felt saddle vary depending upon the size of the patient, his muscularity and the amount of displacement of the fragments. However, the weight is usually applied in about a 2 to 3 ratio, the greater amount being applied to the adhesive strips. In a small child three pounds on the adhesive strips and two pounds on the saddle will usually suffice. In an adult, six pound and four pound weights are suggested. The traction on the adhesive strips pull the fractured fragments out to full length and the weight applied to the saddle corrects the anterior displacement of the proximal fragment. When properly applied the arm itself should be in a horizontal plane. The elbow should be at an angle of about 45 degrees and the hand in slight pronation. The patient is usually quite comfortable.

The bed itself is then raised 6 inches on the side of the injury to allow the body to act as counter traction. It is wise to pin sheets across the side of the bed at a height of about 8 to 10 inches to prevent the patient from falling out during his sleep. In small children, the arm can be placed through the side bars of the bed. For the first twenty-four hours the nurse should check the circulation of the hand frequently. In small children restraints are sometimes necessary to maintain proper position of the body in bed.

Check portable x-rays of the fracture are usually taken at the end of twenty-four hours and the weights can be readjusted at that time if the reduction is not satisfactory. It is not usually necessary to apply extremely heavy traction at first and then reduce it in order to obtain an adequate reduction. On occasions in which there is marked displacement, a general anesthetic may be neces-

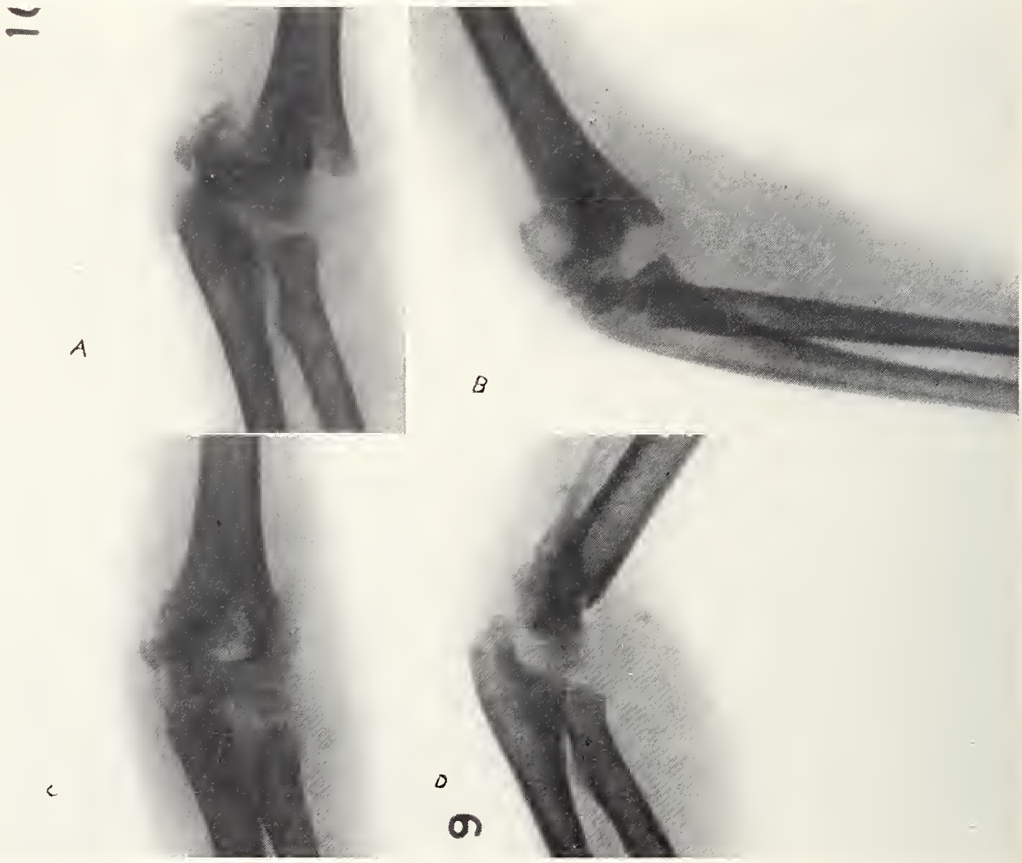

Fig. 2

sary to align the fragments properly. Traction is maintained until moderate callus is present. In small children, ten days to two weeks is the usual required time while in adults, two to three weeks may be necessary. The traction is then carefully removed and a long arm plaster cast is applied, at the bedside, with the elbow in 90 degree of flexion and the wrist and hand in neutral position.

The patient is then discharged from the hospital and followed as an outpatient, the cast being removed when firm union is present. If the fracture is comminuted and all the fragments are not adequately reduced at the time of removal of the traction, open reduction can then be performed and a minimal amount of internal fixation can be applied. It is surprising how seldom, however, this latter procedure is necessary.

CASE ILLUSTRATIONS

Case 1. P. F. This 8 year old girl was seen one week following an extension type supracondylar fracture of the humerus (fig. 2A, B). There had been two unsuccessful attempts at closed reduction prior to admission to the hospital. The chief failure of reduction was in the correction of the rotation of the distal fragment. This gives a characteristic "fishtail" appearance to the proximal fragment (fig. 2B).

Dunlop's traction was applied without anesthesia and maintained for two and a half weeks (fig. 2C and D). A plaster cast was then applied. An excellent anatomic and functional result was obtained.

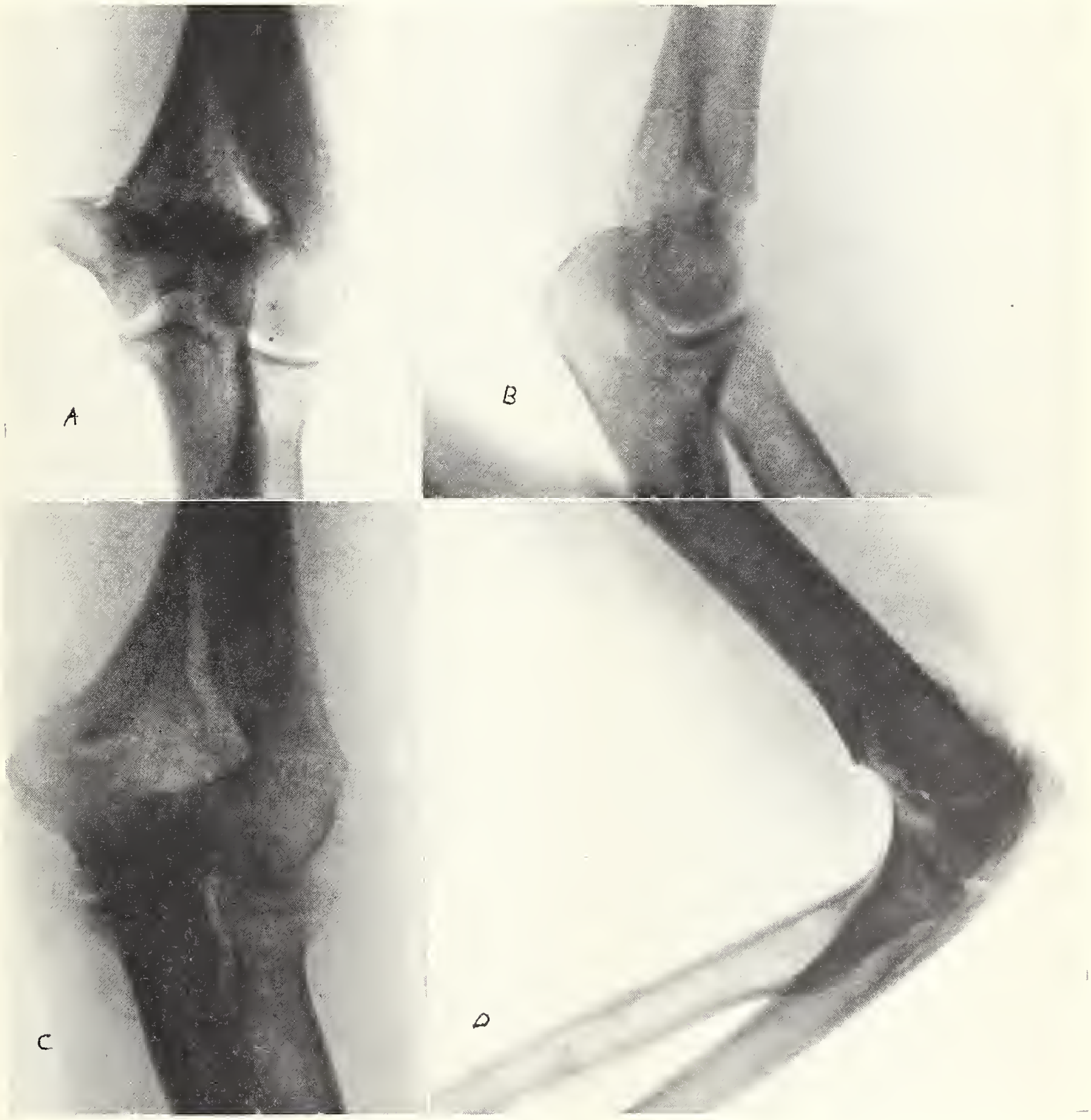

Fig. 3

Case 2. W. S. This 44 year old woman sustained a comminuted "T" type extension fracture of the distal humerus. The circulation was somewhat impaired and an attempted closed reduction was unsuccessful in aligning the intra-articular portions of the fracture. When the elbow was flexed to a position to correct the supracondylar portion of the fracture, there was a complete loss of the radial pulse and circulatory embarrassment of the hand was obvious. Therefore, while the patient was still under the anesthetic, Dunlop's traction was applied and maintained for a period of three weeks. During this time the patient was comfortable. At the end of this time, without anesthetic, a plaster cast was applied (fig. 3C and D). Eventually she obtained an excellent anatomic and functional result.

Case 3. T. S. This 11 year old boy sustained a posterior displacement of the distal humeral epiphysis and the usual associated posterior fracture through the metaphysis of the humerus (fig. 4A and B). The patient was seen one week following his injury after an unsuccessful attempt at closed reduction was performed. An anesthetic was necessary to dislodge the fragments as early union had taken place. When reduction was attempted again it was found that the fragments were unstable. Dunlop's traction was then applied. Check x-rays at the end of twenty-four hours revealed an excellent reduction (fig. 4C and D).

Because the boy was homesick in the hospital, the family demanded that he be allowed to go home. The family doctor applied a posterior splint to the extremity and discharged the patient. This resulted in loss of position of the fragments. I saw the patient eight weeks following the fracture and a rather unsatisfactory open reduction was performed at that time. It was felt that if the limb had been maintained in traction for at least one more week the child would have obtained an excellent result.

Case 4. Z. A. This 19 year old female sustained a severely comminuted extension type supracondylar fracture extending into the joint (fig. 5A). On admission to the hospital there was extreme swelling of the elbow and moderate embarrassment of the peripheral circulation. Because of this, closed reduction was not attempted. The hematoma was injected with novo-

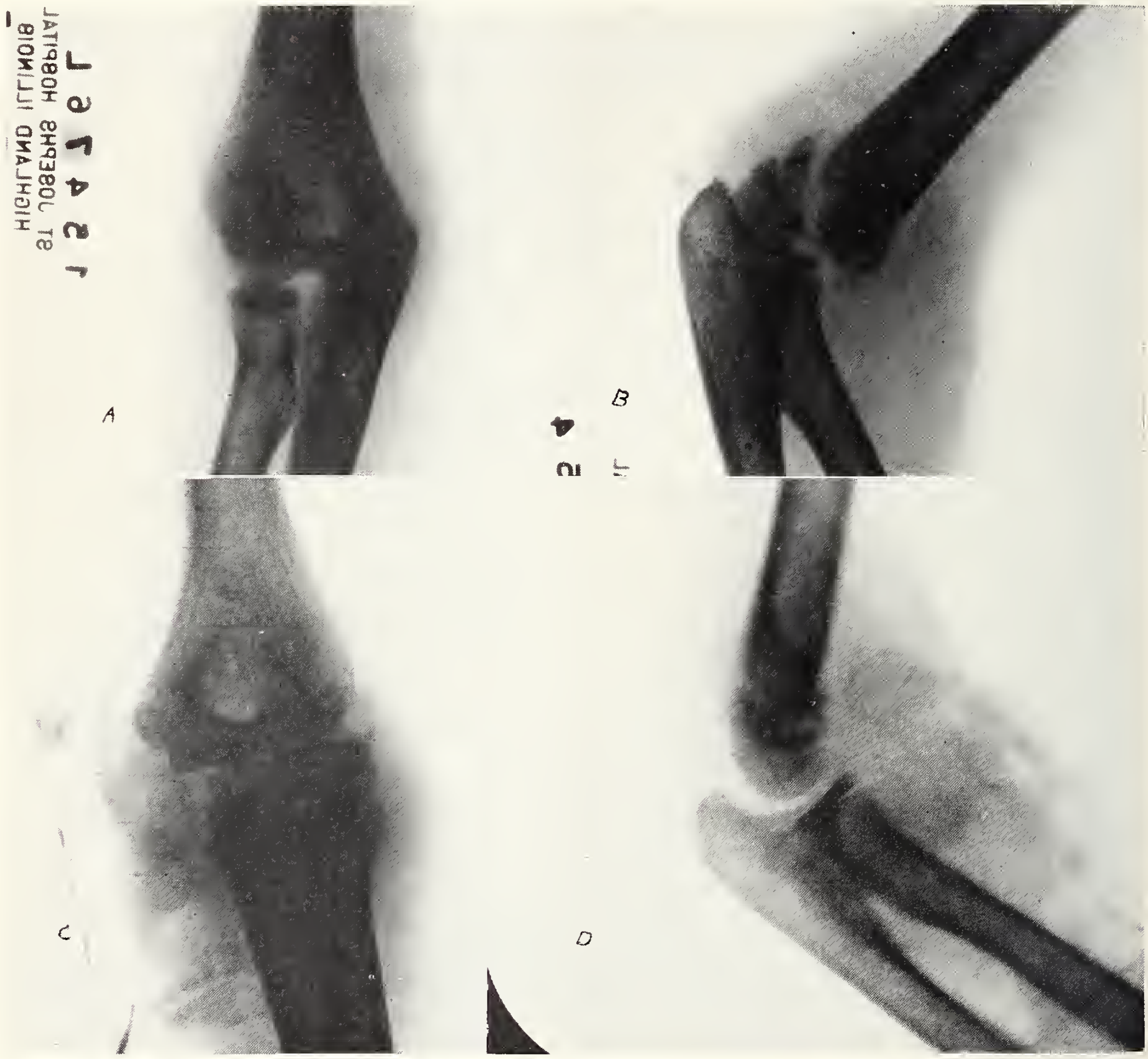

Fig. 4

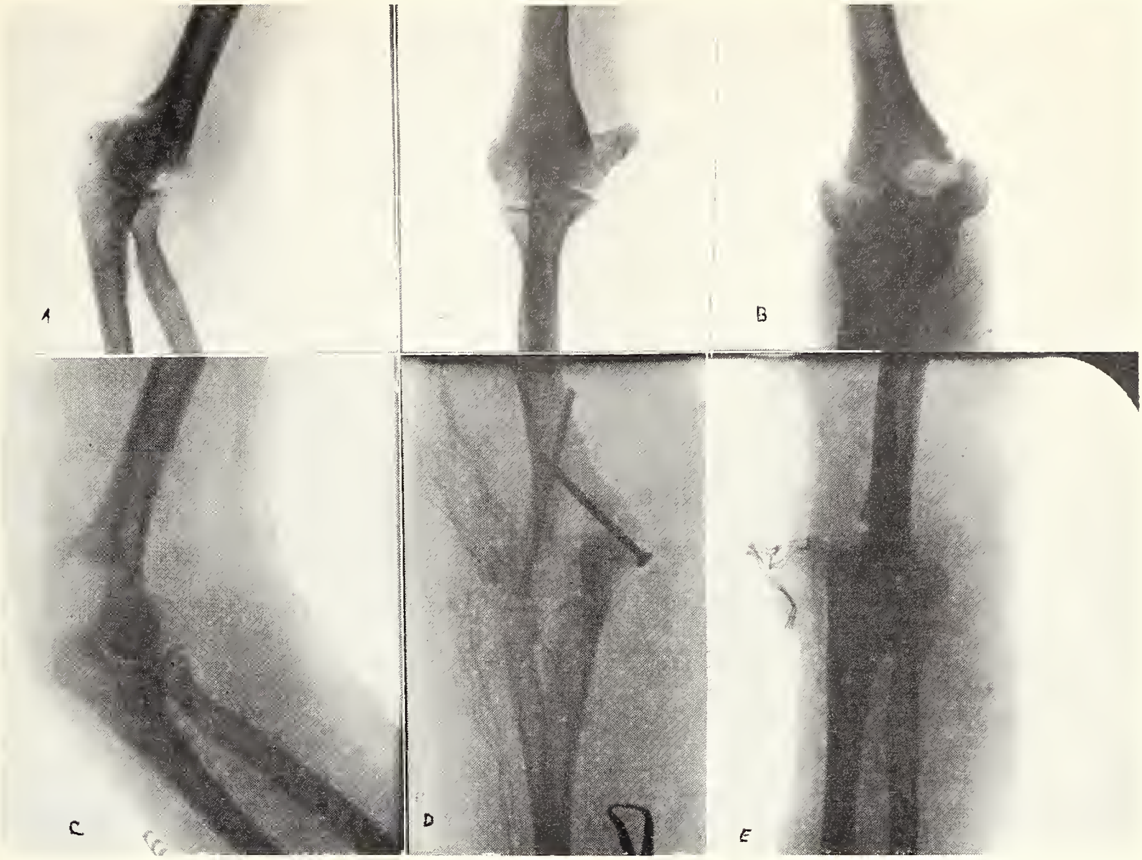

Fig. 5

cain and hyaluronidase and Dunlop's traction was applied. Check x-rays revealed that the intra-articular or "T" portion of the fracture was aligned in excellent position, but for unexplainable reasons the supracondylar portion of the fracture was not maintained satisfactorily (fig. 5B and C). Therefore, the traction was maintained for a period of two weeks. During this period the swelling and contusions about the elbow joint completely resolved and the peripheral circulation was normal. An open reduction was then performed to align the supracondylar portion of the fracture. At the time of operation the intra-articular fragments were found to be in excellent position and to have healed well enough that they remained stable during the procedure. Therefore, the problem had been resolved down to a simple supracondylar type of fracture. This was then easily reduced and maintained with two long screws entering from the medial and lateral epicondyles, going upward and crossing each other and engaging the cortex of the shaft (fig. 5D and E). This case illustrates the advantage of using a combination of Dunlop's traction to obtain reduction of as many fragments as possible in a comminuted type of fracture; and then when it is necessary, perform an open reduction on the fragments that are not aligned. This converts an immediate difficult operation to a rather simple procedure performed two weeks later when all the edema has subsided and the circulation is adequate. This procedure converted a comminuted intra-articular fracture into an extra-articular fracture comprised of two main fragments. In this case it was necessary to remove the screws later as the patient complained of some discomfort about the screw heads. She eventually obtained an excellent anatomic and functional result.

SUMMARY

The purpose of this paper is an attempt to popularize the use of Dunlop's traction in the treatment of difficult supracondylar or comminuted "T" fractures of the humerus. Several representative cases are presented to illustrate its usefulness. It is not a panacea, but in my hands it has given satisfactory results in a great majority of cases.

3720 Washington Ave.

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Tuberculosis Abstract

Pulmonary Coin Lesion

The problem of the asymptomatic solitary, coin shaped, pulmonary lesion was first fully presented in 1948, by O'Brien and others, who studied twenty-one patients in whom coin shaped pulmonary roentgenographic shadows were seen on routine or survey chest roentgenograms. In all instances an exact diagnosis was impossible by clinical methods. The possibly serious nature of the lesions indicated an exploratory thoracotomy in order to establish a histological diagnosis. Eight, or 38 per cent, of the twenty-one patients had bronchogenic carcinoma, and the others had tuberculomas or other nonmalignant lesions. The conclusion of this study was that all such solitary, benign appearing, pulmonary lesions should be treated by exploratory thoracotomy rather than prolonged observation. Similar studies by other investigators show considerable differences in the selection of cases and in the types of lesions found at surgery. The percentage of malignant tumors (including bronchogenic carcinoma, lymphoma, metastatic carcinoma, and various types of sarcoma) that have been found has varied from 15 to 55 per cent. The percentage of bronchogenic carcinoma only has ranged from 4.6 to 49 per cent. The other common entities found have been tuberculomas and hamartomas.

Different authors have used varied criteria for selecting patients; however, all have agreed that the pulmonary shadows in question must be solitary, essentially asymptomatic, and reasonably circumscribed. It has also been agreed that the lesions must be in the lung parenchyma and must be inaccessible to biopsy except by exploratory thoracotomy. There are differing opinions on the inclusion of cavitating lesions and calcific lesions. However, the lack of agreement regarding the size of the lesion has been most apparent. Some authors have specified that the roentgenographic shadows found in their patients should not exceed 4 cm. but it is apparent from the published roentgenograms that many much greater in diameter have been included. The term "coin" implies definitely small, solitary lesions. In view of the differences in criteria of selection, different reports on the incidence of solitary pulmonary shadows, subsequently proved to be malignant tumors, are not surprising.

It is our purpose to emphasize the problem of the small, solitary, pulmonary lesion commonly referred to as a "coin lesion" with regard to case selection and to present a study in the evaluation of the many benign appearing pulmonary lesions of this type being found in chest surveys. This has seemed especially important because of the common and persistent connotation of benignancy associated with the use of the term "coin lesion."

The patients in this study were all seen by the thoracic surgeon after a solitary, isolated, round or oval (coin shaped), asymptomatic pulmonary shadow was found either on a routine chest roentgenogram or on a chest survey roentgenogram for tuberculosis. Exploratory thoracotomy was performed in each case. The following criteria for selecting the cases were carefully observed: (1) Only a solitary lesion was noted on the roentgenogram of the chest. (2) There was no evidence of attachment of the lesion to the chest wall. (3) The lesion was located in the lung parenchyma and was surrounded by aerated lung tissue. (4) There was no cavitation. Cavitation in any unidentified pulmonary lesion is simply another indication for surgical exploration. (5) The lesion was well circumscribed. (6) No adjacent pulmonary infiltration was noted. (7) No lesion was more than 4 cm. in diameter. If larger lesions were included, the series would be much greater; however, larger lesions are automatically considered to demand exploration. Difficulties and dangers arise in the procrastination that occurs with smaller, or coin sized lesions. The 4 cm. limitation proposed earlier agreed with our experience. (8) There were no symptoms that in themselves encouraged surgical exploration. (9) It was not possible to establish a histological diagnosis by bronchoscopy or by other means.

It is not feasible to give a detailed presentation of all thirty-nine cases included in this study. In all instances the patients had many sputum studies, including cultures for Mycobacterium tuberculosis, tuberculin and coccidioidin skin tests, multiple chest roentgenograms, and bronchoscopy. The preoperative diagnosis in all cases was pulmonary coin lesion of an undetermined nature. There was no surgical mortality, and the surgical morbidity was low. Twenty-eight were in the Veterans Administration Hospital, Portland, Oregon and eleven were private patients.

The incidence of bronchogenic carcinoma in this series was 10.3 per cent, which is higher than the 4.6 per cent recorded in another study. The latter series, however, was drawn largely from a relatively young age group. It would seem that the older the patients, the higher the incidence of bronchogenic carcinoma.

One case of solitary melanoma of the lung was included in this series; no extrapulmonary primary source of this was found. With the inclusion of this case, the cases of patients with alveolar cell carcinoma and bronchogenic carcinoma, the incidence of malignant coin lesions becomes 15.3 per cent of the total. It appears that the frequency of bronchogenic carcinoma in small circumscribed, pulmonary (coin) lesions is nearer to 10.3 per cent than to some of the much higher percentages that have been reported. The high incidence of coccidioidal granulomas probably reflects the fact that many of the patients have lived near areas where this disease is endemic.

The wisdom of surgical exploration and histologic identification of these solitary, benign-appearing, coin lesions is evident. The possibility of primary bronchogenic carcinoma being present is sufficient justification for exploration. Until recently physicians usually observed these patients with a presumptive clinical diagnosis of tuberculoma or benign neoplasm for a long time and, unfortunately, some physicians still do. The danger of this is obvious. The roentgenographic appearance of the lesion or any combination of clinical and laboratory tests will not show what the histological nature or bacteriological threat may be in an individual patient. A coin lesion in the lung should be considered as one considers a small lump

(Continued on page 968)

By the National Tuberculosis Association.
By John F. Higginson, M.D., and David B. Hinshaw, M.D., Journal of the American Medical Association, April 30, 1955.

Postgraduate Review

Tuberculosis

Review of Modern Concepts

I. J. FLANCE, M.D., *St. Louis*

BEFORE 1947, THE treatment of tuberculosis was well standardized. Emphasis was on strict bed rest and collapse therapy, including pneumothorax, pneumoperitoneum, phrenic crush and thoracoplasty. Resection was rare because of operative danger and spread of disease. Since the advent of antimicrobial drugs and coincidental improvement in anesthesia in pulmonary surgery, tuberculous therapy has been, and is, in continuous change. Much has been accomplished in the last decade in the drug treatment of tuberculosis, and a number of useful drugs are available. The problem of chemotherapy, however, has not been solved since the ideal of eradication of bacilli from the host cannot be achieved with the present therapeutic agents.

To better understand the problem, it may be well to define the properties of an ideal drug in this disease. The perfect antituberculous drug should be bactericidal or bacteriostatic in low concentrations, and it should be able to accomplish this without development of resistant organisms. It should be readily diffusible, and be able to reach all tissues, including meninges and brain. It should be able to penetrate necrotic, avascular foci in sufficient concentration and to be active in these foci. It should be able to penetrate cell membranes since tubercle bacilli may survive and multiply intracellularly. It should be active against dormant bacilli. It should be relatively nontoxic, even when given for long periods of time and, finally, it should be stable and not excreted too rapidly from the host.

With that ideal in mind, the properties of the three most commonly used antituberculous drugs; namely, streptomycin, iso-nicotinic acid hydrazide or INAH, and para-amino salicylic acid or PAS, may be reviewed. Streptomycin and INAH are both bacteriostatic in low concentrations; PAS is less so. To all three drugs bacterial resistance develops, although it is important to note that mixed populations of resistant organisms develop, and the finding of resistant strains may not be a contraindication to combined therapy. The use of combined therapy has been a step toward solving the problem of bacterial resistance. All three drugs are absorbed readily. Streptomycin reaches all cavities, as does INAH, and the latter also penetrates cell membranes in concentration enough to inhibit multiplication of bacilli. Streptomycin also penetrates cell membranes, but in a relatively ineffective concentration. Although INAH penetrates caseous foci, it may not be effective since the biochemical environment of the caseous lesion can alter the action of the drug. This may explain why a drug may be bactericidal *in vitro* and not *in vivo*. Streptomycin and INAH are relatively ineffective against resting or dormant organisms. These are some of the reasons bacilli survive in caseous foci, and thus eradication is unobtainable. These areas are probably the source of exacerbation of infection. The three drugs are relatively nontoxic in the doses used today. Eighth nerve toxicity is the most important toxic reaction related to streptomycin, but it is rarely observed with the present doses. Peripheral neuritis and central nervous system symptoms are the most important toxic reactions to INAH, but again these are infrequently observed with present dosage. Withdrawal symptoms, including nightmares, are not uncommon with INAH, and the drug should be withdrawn in decreasing dosage. PAS causes a large number of gastrointestinal upsets. Drug rashes may occur with all three. Streptomycin and INAH are stable; PAS is less so. Dihydrostreptomycin has the same properties as streptomycin, but causes more deafness. Resistance to streptomycin is synonymous with resistance to dihydrostreptomycin. Viomycin and terramycin are of minor significance in the treatment of tuberculosis, and are used only in major resistant cases. They are not as effective as streptomycin or INAH. Viomycin may also cause kidney damage. Pyrazinamide is now under intensive study since, in the experimental animal, it, together with INAH, has the ability of completely eradicating tubercule bacilli. The serious drawback to its use is the occurrence of toxic hepatitis, and pyrazinamide is not recommended at this time for general usage.

The pathologic anatomy of tuberculosis has also been greatly altered since the advent of chemotherapy. According to Auerbach, the effects of drugs on anatomic lesions may be summarized as follows:

1. There is a reduction of the perifocal reaction

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which is an alveolar filling process around the early tuberculous focus.

2. There is more rapid healing.

3. There is a difference in cavity healing which results in:

a. A decrease in thickness of the walls of encapsulated foci and cavities.

b. A decrease in pleural thickening.

c. A decrease in pulmonary emphysema and fibrosis.

d. A more frequent healing of tuberculous cavities with patent reepithelialized bronchi leading to either inspissation of necrotic contents, or evacuation through patent bronchi and open cavity wall healing.

e. A greatly reduced incidence of pulmonary aneurysms and, therefore, of hemorrhages.

It is now established that any form of active tuberculosis should be treated with drugs, including childhood disease and probably recently converted tuberculin reactors. There is no ideal drug regimen except that it is generally believed that streptomycin, INAH and PAS should not be given alone but, under ordinary circumstances, should be given in combination. For most cases of pulmonary tuberculosis INAH, in doses of 3 to 5 mgs. per kilogram of body weight per day, plus 6 grams of PAS per day in divided doses, is the easiest combination, and one which gives as good results as any regimen, providing one is dealing with drug sensitive organisms. Streptomycin intramuscularly, 1 gram twice a week, and 6 grams of PAS a day, is also an effective regimen. PAS is used primarily to delay development of INAH or streptomycin resistant strains, and has been used in doses of 12 to 20 grams a day. Gastrointestinal disturbances are much less with the smaller 6 gram dose which is apparently just as effective. INAH used alone is effective, but a greater incidence of INAH resistant strains develops. However, the INAH resistant strains, in contradistinction to streptomycin resistant organisms, apparently lose some of their virulence. Triple drug therapy should be reserved for miliary tuberculosis or tuberculous meningitis, or perhaps acute tuberculous pneumonia. It is important to note that since the use of INAH was instituted, no case of miliary tuberculosis or tuberculous meningitis has been recorded while the patient was under treatment with this drug.

The length of treatment is not well established except it is agreed that prolonged and uninterrupted therapy gives the best results. It is suggested that the average case be treated for from one to one and one half years; longer if necessary, but certainly not shorter. In this regard it is well to remember that chemotherapy does not eradicate infection, but tends to tip the balance in favor of healing and containment of infection. The longer the patient remains well after treatment, the less likely is he to relapse since the longer bacilli in caseous areas remain metabolically inactive, the less capable they are of reactivating infection. It is worthwhile to emphasize that chemotherapy is more effective if treatment is uninterrupted. The choice of a regimen should be made carefully, and then not stopped unless serious toxicity becomes manifest or bacilli become resistant. There is little doubt but that chemotherapy has radically changed the treatment of tuberculosis, but it has not eliminated the need for other forms fo therapy. Bed rest need not be as complete or prolonged, but is still indicated since, in the final analysis, it is the body itself, through its own antimicrobial defenses, which must check the growth of surviving bacilli. Collapse therapy, and perhaps thoracoplasty, have almost disappeared from the therapeutic regimen, and their place has been taken by resectional surgery. The latter is done only after the patient has been prepared by chemotherapy. Mention should also be made of home care treatment in a few well selected cases, but for most patients initial sanatorium care is recommended.

Results to date, based on the principles outlined, have been excellent. Many more patients have attained an inactive status than formerly, including the far advanced group. The length of sanatorium stay has been markedly shortened, patients rehabilitated more readily, and families kept together because of the shortened length of treatment for key members. The postsanatorium availability of drugs given in clinics made available to the medically indigent patient has greatly aided in keeping many patients under careful observation and in helping them maintain their inactive status.

The spectacular advances in the treatment of tuberculosis in the last decade, together with the closing of a few sanatoria, have led to a widespread belief that tuberculosis is no longer a major problem. Nothing could be further from the truth. Tuberculosis is still the greatest killer among infectious diseases. The great incidence of live bacilli in the population, both in known and unknown cases of infection and disease, and the fact that modern therapy is unable to eradicate bacilli, make it mandatory that efforts continue in the search for answers to many problems in this disease. Among these are those of the host, his immunity, acquired or natural; the social and economic aspects of the disease; the problems of better pathologic and bacteriologic technics and hopefully, the problem of finding a drug which will eradicate tubercle bacilli.

4652 Maryland Ave.

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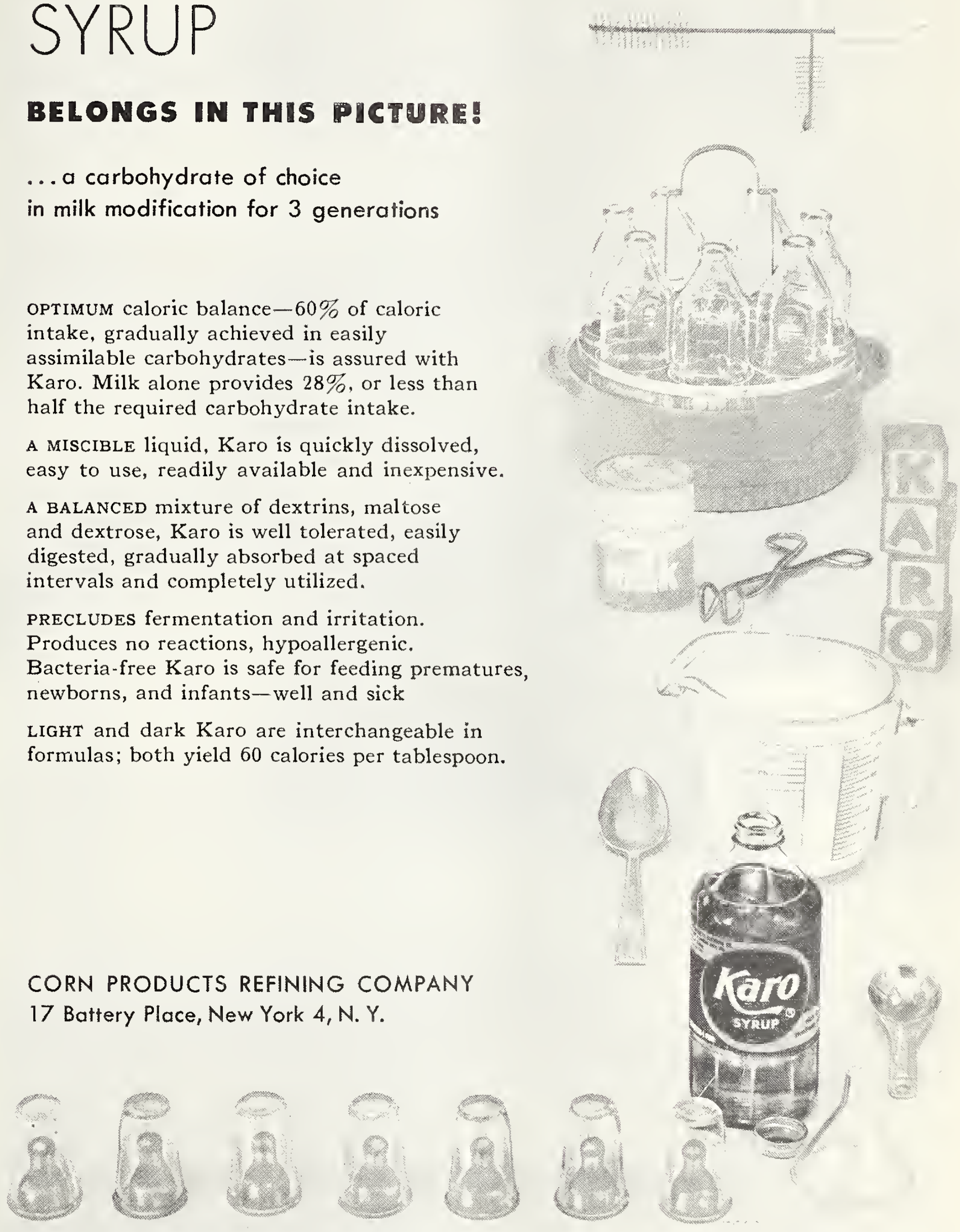


Special Article

Compulsory Cash Disability Benefits

THE MEDICAL PROFESSION suddenly is faced by the most serious national legislative crisis to arise since the 1949-1950 attempt to enact a system of national compulsory health insurance. The new problem, cut of the same cloth, has emerged unexpectedly as a result of a legislative blitz in the United States House of Representatives. The House, on July 18, by a roll call vote of 372 to 31, passed H. R. 7225, known as the Social Security Amendments of 1955. The bill was rushed through the House under a procedure suspending the rules, barring amendments, limiting debate to forty minutes, and requiring a two-thirds vote of approval. Earlier the measure had been sped through the House Ways and Means Committee in executive session without public hearing, despite the protests of Republican committee members who demanded open hearings and careful study of the legislation.

The most controversial provision of H. R. 7225, and the one with the most serious implications for the medical profession, is the section that would make permanently and totally disabled persons at age 50 eligible to receive Social Security benefits not now available to others until age 65. While the American Medical Association, like all thoughtful groups and individuals in the country, has become increasingly concerned over the continued, general expansion of the Social Security system, it takes no position on those proposals that do not involve health or medical care. The Association, however, is specifically opposed to the plan for compulsory cash disability benefits, which would have a direct effect on the medical profession and the future of the American medical care system. Fortunately, the Senate Finance Committee, headed by Sen. Harry Byrd, Virginia Democrat, already has wisely decided to postpone action on H. R. 7225 until the second session of the 84th Congress. At that time there will be extensive public hearings on all aspects of the legislation. This gives the medical profession, and all others interested in these far reaching Social Security amendments, some five months in which to acquaint themselves with the facts and gird for action.

In addition to the disability benefits, the House bill would lower the retirement age for women from 65 to 62, extend monthly benefits for permanently and totally disabled children beyond the age of 18, and expand compulsory social security coverage to all self employed professional groups except physicians. Affecting about 1,300,000 persons, the changed benefits will cost an estimated 2 billion dollars a year for the next twenty years and about 2.5 billions annually thereafter. The bill would increase payroll taxes in 1956 by 0.5 per cent each on employers and employees and 0.7 per cent on the self employed. The same increases would be applied to the already scheduled tax rises in 1960, 1965, 1970 and 1975, bringing the social security tax in 1975 to 4.5 per cent each on employers and employees and 6.75 per cent on the self employed. The extension of monthly benefits at age 50 to the totally and permanently disabled would apply to an estimated 250,000 persons in the first year and would cost 200 million dollars in benefits, according to the bill's sponsors. In twenty-five years they predict that one million workers would be receiving disability benefits amounting to 850 million dollars a year. To be eligible for benefits a worker must be at or over age 50, be fully and currently insured under social security, and have twenty quarters of coverage in the last forty quarters ending with the quarter of disablement.

Benefits would be payable only after a six months' waiting period. The determination of disability would be made by the state agencies that make the determinations under the disability "freeze" provisions enacted last year. The definition of disability is the same as in the freeze provision of present law, except that there would be no presumed disability for the blind. To promote rehabilitation, the bill provides that a person who performs work while under a state rehabilitation program will not, solely by reason of that work, lose his benefits during the first year. The bill also contains a provision that would make it possible to stop the benefits of anyone who, without good cause, refuses available rehabilitation services. The present bill would not provide benefits for the dependents of disabled workers.

The real meaning and future implications of this proposal, as simply another step toward a complete, "cradle-to-grave" social security system, can be seen in some of the remarks made last July 18 in the House debate or published in the Congressional Record for that day. For example, Rep. Dingell of Michigan, perennial advocate of national compulsory health insurance, included the following in a 10-point program for expanding the social security system: "Temporarily disabled persons who are insured on the basis of recent employment before their disability should be eligible for cash benefits for upwards to 26

Reprinted from *The Journal of the American Medical Association,* **158**:1442-1443 (Aug. 20) 1955.

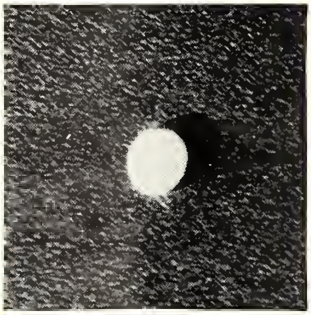
The organisms commonly involved in

Pneumonia

D. pneumoniae (10,000X)

K. pneumoniae (6,500X)

Strep. pyogenes (8,500X)



Staph. aureus (9,000X)

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weeks in a year. Provisions should also be made for cushioning the cost of medical services during such period of temporary disability. The disability benefit provisions of H. R. 7225 should be reviewed with a view to reducing or eliminating the requirement that a totally and permanently disabled worker must be age 50 before being eligible for benefits. Consideration should also be given to making benefits available to dependents of insured workers who became totally permanently disabled."

Rep. Dingell also said: "Another and important amendment which I have been sponsoring over the years, and which will eventually become law, provides 60 days of free hospitalization for all recipients of social security benefits." Numerous members of the House echoed Rep. Dingell's desire for still greater expansion of the social security system. Rep. Zablocki of Wisconsin declared that "the bill before us represents a step in the right direction, and for that reason merits our support." Rep. Fino of New York said that "I will support this bill, not because it goes far enough in humanizing our social security system, but because it represents a step in the right direction. . . . If we are to improve and extend our law, let us go all the way now." And Rep. Roosevelt, also of New York, commented: "It is my candid opinion that such a hearing (public hearings by the House Ways and Means Committee) would have been a farce."

However, a few courageous Congressmen spoke out in protest against the way in which the bill was railroaded through the House, and they urged public hearings and careful study of the legislation. Among them was Rep. Jenkins of Ohio, who said: "I do not, however, believe that our committee has discharged its obligation to either the Congress or to the American people by its brief and closed door consideration of this vital legislation. I have sought to point out the grave social and economic implications of the bill. I have dwelt at some length upon the staggering ultimate costs of this developing program because I do not believe that either the Congress or the public has any conception of its magnitude."

Rep. Kean of New Jersey had this comment: "By their action in refusing to have public hearings, by their action in turning down my motion to invite insurance actuaries to estimate the cost, by their action in turning down my motion to invite doctors to testify as to possible means of determining disability, the Ways and Means Committee has abdicated its responsibility, and the Senate will write the bill."

Rep. Thomas B. Curtis of Missouri told the House: "All we are engaged in today is making a mockery of the House of Representatives and confirming the mockery already made of itself by the Ways and Means Committee. The Senate leaders have already announced that they intend to hold hearings on this bill. They have already stated that they are not going to abandon, just yet at any rate, the time tested procedures that produce good legislation and protect against bad legislation."

The issue will be joined when the second session of the 84th Congress convenes in January and the Senate Finance Committee begins public hearings on the bill.

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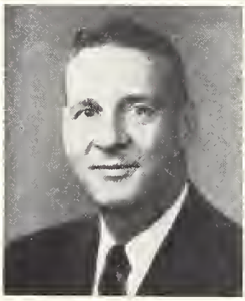
President's Page

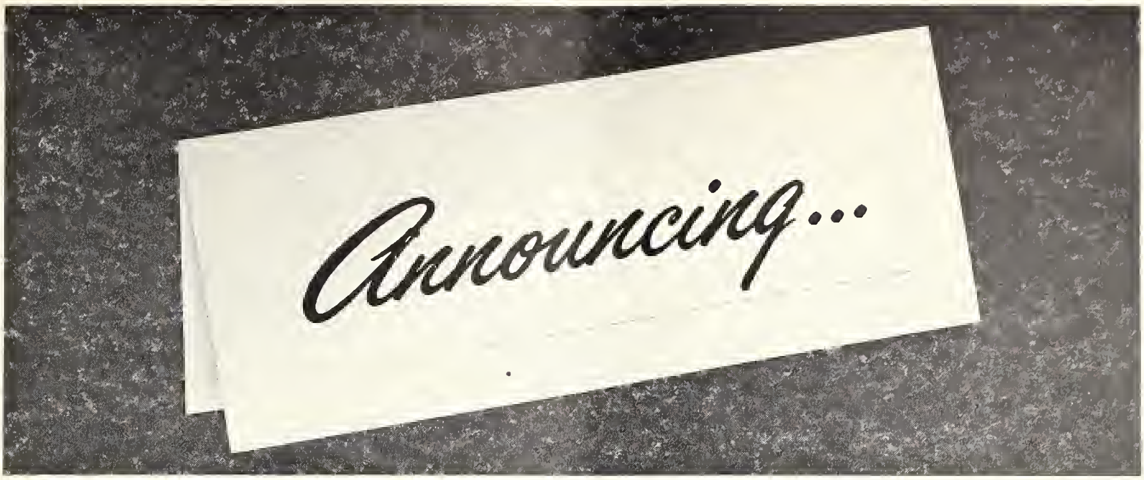
With no apology cash disability benefits are discussed in my comments for the third time. House Resolution 7225, now pending in the United States Senate, contains a provision which would make totally and permanently disabled persons eligible to receive their Social Security retirement benefits at age 50 instead of age 65. Physicians would examine candidates for disability benefits and determine the nature and scope of such disability. The government, of course, must set up the machinery necessary to supervise medical determination of disability.



What will follow if the case disability benefits section is enacted in 1956? Would the next amendment provide for cash benefits for partial disability? Would the next amendment provide for medical care to rehabilitate the partially and totally disabled? Would the next amendment provide medical care for all, regardless of disability? Would the next?

See Missouri Medicine, pages 956 and 958, this issue, for further information. Also the *Journal of the American Medical Association,* Nov. 5, 1955, pages 1017-1018, carries an article entitled "The A.M.A. Viewpoint."

Have you written to your Congressman and Senator?



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EDITORIALS

And Now—Chiropractic Psychiatry

Last week a patient asked our opinion of the electropsychometer. The name was new, our ignorance was total, and the challenge was stimulating. In a few days there was an abundance of advertising literature at hand, and by this time the inquiring patient has probably been thoroughly electropsychometerized.

We glean from the booklets which have been mailed to us the following questionable information. It seems that chiropractic colleges are being forced to include in their instruction a course in mental therapy. Formerly the chiropractor was taught that the cause of all disease was subluxations but there was no satisfactory answer to the cause of the subluxations. Then, too, the people are getting wise to psychosomatic medicine—body, mind and soul treatment, which is being explained in leading magazines and newspapers. And some chiropractors are deserting the old school which believes the backbone is the cause of it all. Consequently they are learning to cope with personality disorders, and make a science of chiropractic instead of a mumble-jumble of conflicting theories. Those chiropractors who aspire to qualify as chiropractic psychiatrists will first attend a course of instruction at the Concept Therapy Institute where they will learn to understand the principle underlying all healing and enable them to eliminate disease on the mental and spiritual, as well as on the physical plane.

Comes now the Psychic X-ray or Electropsychometer—a wonder instrument which will enable the chiropractic psychiatrist to penetrate into the deep recesses of the patient's mind and discover hidden causes of physical diseases. Negative concepts may be uncovered, and factors causing frustration. This instrument will indicate which one of the Six Anatomical Zones of Health and Disease is out of harmony, and what to do to correct it. It reveals, as nothing else can, the complexes, traumas and festering traumas lurking in the subconscious. In the hands of a skillful operator it performs a piece of work that can be best described as psychic surgery. It is amazing that this powerful aid to the chiropractic psychiatrist is a portable little black box which weighs only twenty-two pounds. One of its most valuable features is that this instrument consistently differentiates between painful and pleasant human emotions. Other devices of this type surge on any emotion, indiscriminately.

Actually reading the voluminous testimonials and advertising brochures, from which these statements were verbally lifted, will probably present an even more fascinating lure to the unsuspecting prospective patient. While the public is generally more enlightened than ever before in matters of scientific medical progress, it continues to be confronted with such medical hokum. And until the majority can differentiate the good from the bad, just so long will such quackery continue to flourish.

N. J. Eversoll, M.D.

Reprinted with permission from *News and Views*, October 1955.

Of Wood and Men

Seated cozily in my easy chair I watch the wood embers in the fireplace sputter and glow. Outside the frosted windows the winds twist and howl. The snow, swept clean from the roadway, settles in resistant areas to form drifts of scenic splendor. How fortunate I am to be inside sharing the snug warmth of burning wood.

My eyes return again to the fireplace. The flames dance along the logs with an occasional sputter, a flying spark, a hiss or sizzle. I begin to doze and, reflected in the leaping flames, I see the lives and personalities of men I have known; as many kinds and variations as there are woods in the forest.

Like the burning of green pine, the same flying sparks and spontaneous explosions are emitted by men of related temperaments. Others, more serenely crackling and sputtering, grumbling and complaining, are carried away with their own pessimism.

Again, the more venomous sizzle and hiss, fomenting racial and religious hatred while emitting flames of destruction within their own sphere.

So does the burning wood reflect the lives of men. Some may never reach the fireplace, their destiny to lie in the forest of humanity and be destroyed by the termites of self-satisfaction, never to spark, sputter or glow. All in all, each serves a purpose in His Plan.

Of wood and men, we prefer the well seasoned timber whose embers emit a comforting warmth and a continuous glow with little crackle, hiss or sputter. Such a man I would prefer to have for my physician.

Martyn Schattyn, M.D.

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1. Selling, L.S.: J.A.M.A. 157:1594 (April 30) 1955.
2. Borrus, J.C.: J.A.M.A. 157:1596 (April 30) 1955.

*Trademark

Missouri Medical Meetings

American Academy of Allergy, Chase Hotel, St. Louis; postgraduate review, Feb. 4-5; scientific session, Feb. 6-7-8, 1956.

Missouri State Medical Association, St. Louis, April 8-11, 1956.

St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.

Barton-Dade County Medical Society—third Wednesday of each month.

Benton County Medical Society—meets only on call.

Boone County Medical Society—first Tuesday of each month.

Buchanan County Medical Societey—first Wednesday of each month.

Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.

Callaway County Medical Society—third Thursday of each month.

Cape Girardeau County Medical Society—first Monday of each month.

Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.

Clay County Medical Society—last Tuesday of each month.

Clinton County Medical Society—meets only on call.

Cole County Medical Society—first Monday of each month.

Cooper County Medical Society—first Monday after the 15th of each month.

Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.

Dunklin County Medical Society—first Tuesday of each month.

Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.

Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.

Greene County Medical Society—fourth Friday of each month.

Henry County Medical Society—meets only on call.

Holt County Medical Society—meets only on call.

Howard County Medical Society—meets only on call.

Jackson County Medical Society—fourth Tuesday of each month execpt June, July and August, at auditorium of General Hospital No. 1.

Jasper County Medical Society—second Tuesday of each month, September through May.

Jefferson County Medical Society—meets only on call.

Johnson County Medical Society—meets only on call.

Laclede County Medical Society—second Monday of each month at 6:00 p.m., at the Louise Wallace Hospital, Lebanon.

Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.

Lewis-Clark Scotland County Medical Society—meets only on call.

Lincoln-St. Charles County Medical Society—third Thursday of each month.

Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month. 7:30 p.m.

Miller County Medical Society—meets only on call.

Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.

Moniteau County Medical Society—second Thursday of each month.

Newton County Medical Society—meets only on call.

Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.

North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.

Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.

Pemiscot County Medical Society—third Thursday of each month.

Perry County Medical Society—second Thursday of each month.

Pettis County Medical Society—third Monday each month September through May.

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.

Pike County Medical Society—third Tuesday of each month.

Platte County Medical Society—meets only on call.

St. Louis County Medical Society—second and fourth Wednesday of each month.

St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.

Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.

South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.

Vernon-Cedar County Medical Society—meets only on call.

Webster County Medical Society—meets only on call.

West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

The 7th Annual Assembly of the Missouri Academy of General Practice was held at the Governor Hotel, Jefferson City, October 26-27, 1955. The total registration was 193 with physician registration comprising 109 of this number.

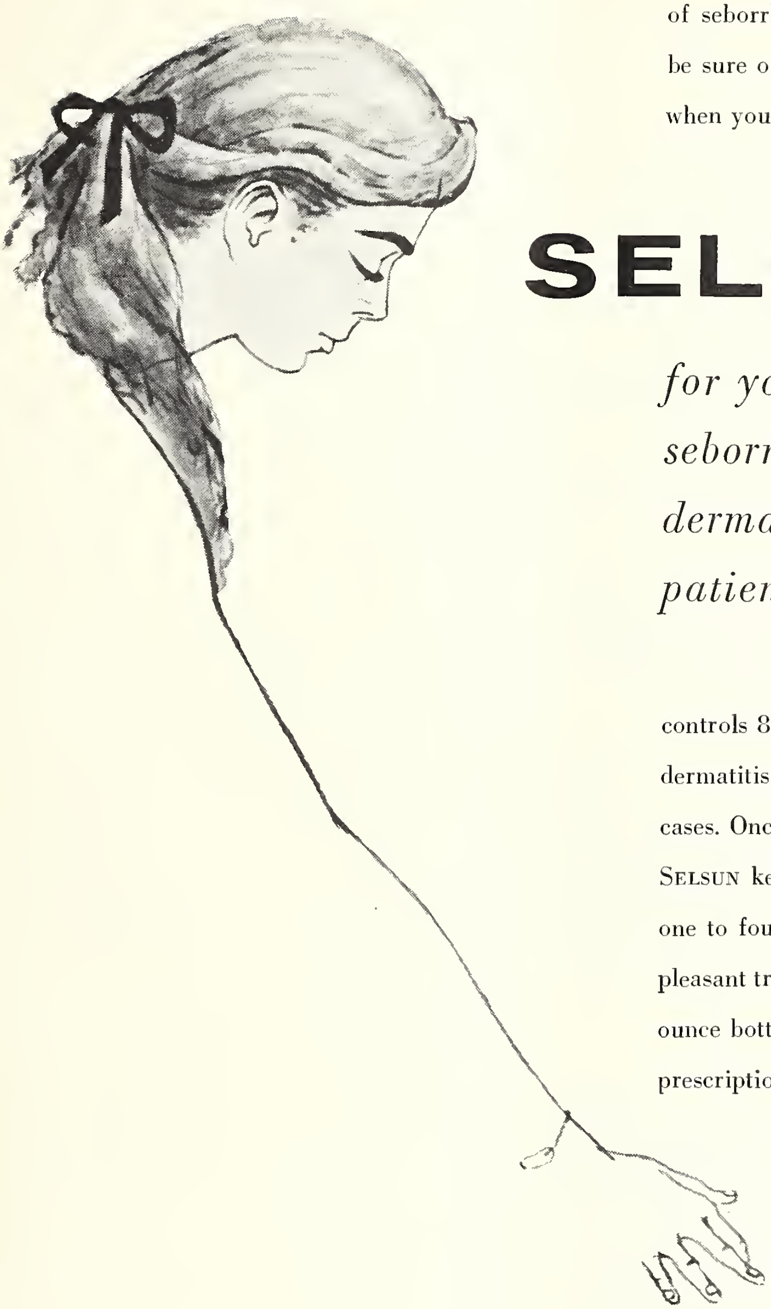
The session began with a meeting of the Board of Directors on Tuesday evening, October 25. The annual business session of the Academy was held Wednesday morning, October 26.

The scientific program got under way at 11:00 a.m., October 26, and ran through to 5:00 p.m., including a luncheon session.

One of the highlights of the meeting was a panel discussion on "Cancer of the Cervix and Uterus," Wednesday afternoon. The panel was moderated by A. E. Spelman, M.D., Smithville, with Victor Buhler, M.D., pathologist of Kansas City and President of the Missouri State Medical Association, and Clarence Davis, M.D., Professor of Obstetrics and Gynecology and Head of Department, University of Missouri Medical School, Columbia, participants. A large number of questions were presented to the panel by the audience with many unanswered because of limited time.

Some 125 persons attended the banquet on Wednes-

Dr. Dwyer was installed as the new president.



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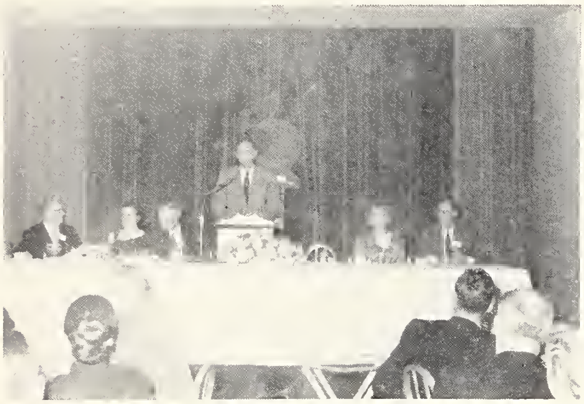
day night. On this occasion, Dr. T. L. Dwyer, Mexico, was installed as president by retiring president, Dr. G. H. Wood, Carthage.

The main address of the evening was given by Rabbi Ferdinand M. Isserman, St. Louis. His was a splendid talk centered around the ever growing smallness of this world of ours as caused primarily by scientific advancements. The complete attention manifested by those present while this talk was being given was sufficient testimony to its reception.

Speakers on the two day program, other than previously mentioned, included: Ashton Graybiel, Captain, MC, USN, Pensacola, Florida; William A. Hudson, M.D., Detroit, Michigan, President of the American College of Chest Physicians; Thomas Thale, M.D., St. Louis, Chairman, Mental Health Committee of the Missouri State Medical Association; Robert E. Bolinger, M.D., Associate Professor of Medicine, University of Kansas School of Medicine, Kansas City, Kansas, and A. K. Busch M.D., St. Louis, Clinical Director of the St. Louis State Hospital.



Rabbi Isserman was the principal speaker.

The panel discussion was followed by informal discussion.

Rabbi Isserman was thanked for his presentation.

New officers and new directors for the Academy are: President, T. L. Dwyer, M.D., Mexico; President-elect, Charles E. Martin, M.D., St. Louis; Vice President Roy Pearse, Jr., M.D., Nevada; Secretary-Treasurer, James Trolinger, M.D., Jackson, and the Directors, John Crowe, M.D., Cape Girardeau; A. E. Spelman, M.D., Smithville, and William C. Allen, M.D., Glasgow.

NEW MEMBERS

Cox, William L., M.D., 101 West Kansas, Liberty. Clay County.

London, Stanley L., M.D., 4652 Maryland Ave., St. Louis. St. Louis County.

O'Connor, Robert J., M.D., 751 St. Francois St., Florissant. St. Louis County.

Potter, Caryl A., Jr., M.D., 301 Physicians and Surgeons Bldg., St. Joseph. Buchanan County.

Thurman, H. C., M.D. 11 East First St., Parkville. Platte County.

Zacharias, David L., M.D., 6644 North Oak St., Route 4, Kansas City. Clay County.

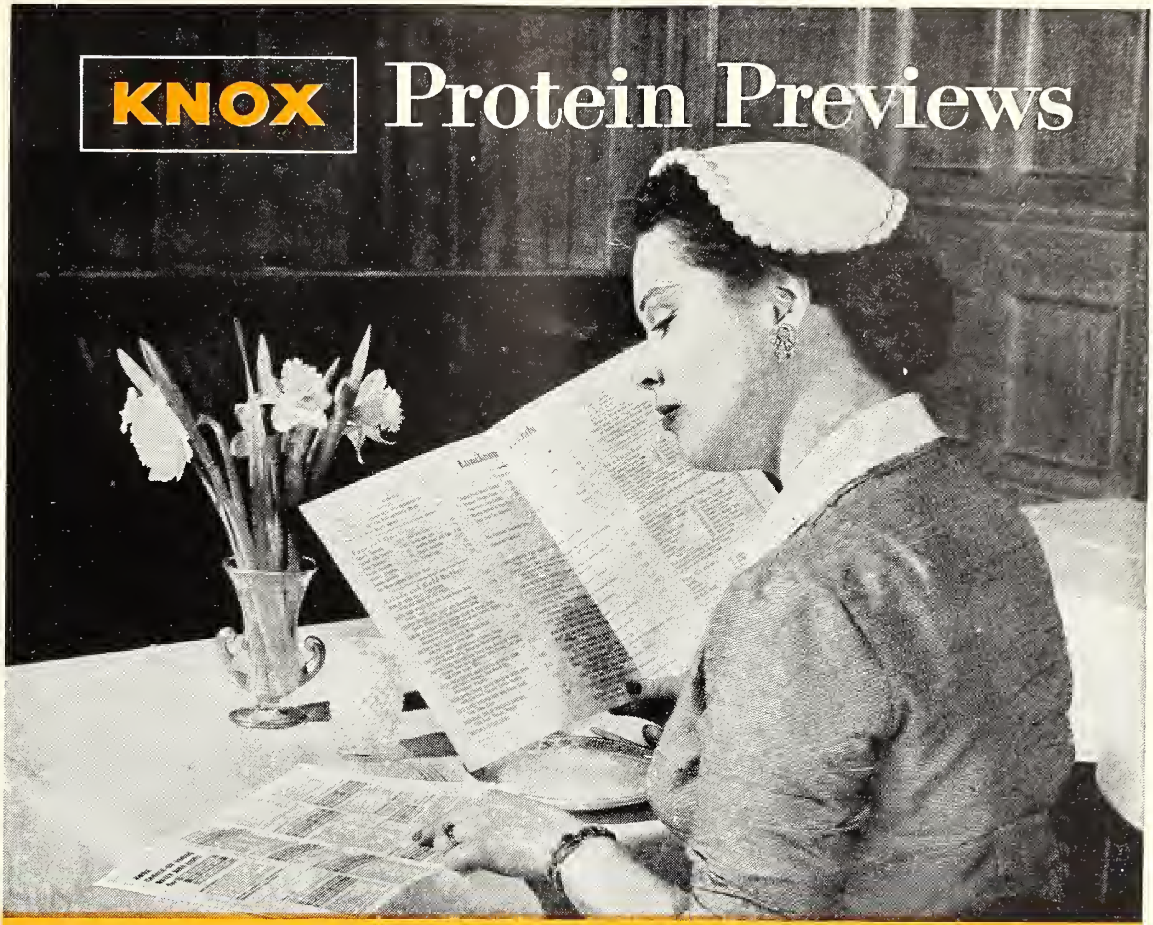
Tuberculosis Abstract

(Continued from page 950)

in the breast, i.e., as malignant until proved otherwise.

It is generally accepted that the proper treatment for a known tuberculoma is removal by surgery. It has been shown that many so-called tuberculomas contain viable tubercle bacilli. These tuberculomas can and do caseate, cavitate, and produce widespread pulmonary disease. Some authorities believe that approximately 25 per cent of the untreated tuberculomas "break down." Of the lesions in this study, 31 per cent provided to be tuberculomas. We believe that the presence of calcium in a coin lesion should not defer surgical exploration unless the patient is a poor surgical candidate with systemic disease or unless the lesion is less than 1.5 cm. in diameter and is solidly calcified. After the surgeon is satisfied as to the histopathological diagnosis, he may then perform whatever definitive surgical treatment is indicated. In view of the many chest roentgenogram surveys that are being conducted throughout the United States, it is important that all physicians be made aware of this problem in order that they may properly advise the patients referred to them from the survey centers.

Results in a series of thirty-nine cases of solitary, parenchymal, so-called pulmonary coin lesions show that a significant number of these lesions are malignant neoplasms or tuberculomas and should, for this reason alone, be treated by exploratory thoracotomy and identification rather than by a period of observation. Prompt surgical attack on the so-called pulmonary coin lesion affords one of the best opportunities for early discovery and early treatment of bronchogenic carcinoma.



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Eliminates Calorie Counting

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To help your obese patients reduce and stay reduced, Knox introduced this year a new dieting plan based on the use of nutritionally tested Food Exchanges.[1] The very heart of this new dietary is a "choice-of-foods diet list" chart which presents diets of 1200, 1600 and 1800 calories.

Each of these diets may be easily modified to meet special needs. However, the important points for your patients are that the use of this chart eliminates calorie counting, permits the patient a wide range of food choices and dispels that old empty feeling by allowing between-meal snacks.

These advantages should make your management of difficult and average cases easier. If you would like a supply of the new Knox charts for your practice, just fill in the coupon below.

---

[1] Developed by the U. S. Public Health Service assisted by committees of The American Diabetes Association, Inc. and The American Dietetic Association.

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YOUR NAME AND ADDRESS:

News

One of the guest speakers at a postgraduate neurosurgical meeting to be presented by the University of Oklahoma School Medicine on December 8 will be **Leonard Furlow**, M.D., St. Louis.

A testimonial dinner was given for **Hillel Unterberg**, M.D., St. Louis, by the staff of Alexian Brothers Hospital, St. Louis, on September 28. Announcement was made at the dinner that the department of neuropsychiatry would now be known as the Hillel Unterberg Department of Neuro-Psychiatry.

Moderator for the November radio program of the Buchanan County Medical Society was **H. E. Wachter**, M.D., St. Joseph. Serving on the panel on "Traffic Safety" were **L. Paul Forgrave**, M.D., and **S. E. Mcluney**, M.D., St. Joseph.

At the fifty-fifth annual conference of the Missouri Association for Social Welfare, held in Kansas City, October 26 to 28, **Louis H. Forman**, M.D., presided at a section on "Traveling Psychiatric Clinics"; **Cecil G. Leitch**, M.D., presided at a section meeting on "The Retarded Child as a Functioning Member of the Community," and **Robert E. Bruner**, M.D., discussed "Medical Aspects of Early Comprehensive Planning for the Mentally Retarded."

Guest speaker at the Malden Rotary Club on September 20 was **Charles T. Edmondson**, M.D., Malden.

During the Mississippi County Fair, one day was set aside as the Drs. Martin Day, and **A. J. Martin**, M.D., and **S. P. Martin**, M.D., East Prairie, brothers who have both practiced for more than fifty years, were honored. At a reception in the evening they were each presented a plaque expressing the appreciation of their fellow citizens.

At the sixtieth annual meeting of the American Academy of Ophthalmology and Otolaryngology held in Chicago in October, **M. Hayward Post**, M.D., St. Louis, was elected a vice president.

Among alumni in attendance at a reunion of the University Medical College, Kansas City, held October 5, was **G. Wilse Robinson, Sr.**, M.D., who taught physiology in the school from 1903 to 1913.

"Cerebral Palsy" was discussed by **H. Ewing Wachter**, M.D., St. Joseph, before the South Side Rotary Club of St. Joseph on October 6.

New officers of the medical staff of Deaconess Hospital, St. Louis, recently elected, are **Clarence E. Mueller**, M.D., president; **Edward M. Cannon**, M.D., vice president, and **Birkle Eck**, M.D., secretary-treasurer.

A white mass honoring St. Luke, patron of physicians, was celebrated recently, the first of its kind in St. Louis, by the Very Rev. Paul C. Reinert, S.J., president of St. Louis University.

"Public Relations" was the subject of a talk presented by **A. S. Bristow**, M.D., Princeton, at Humeston, Iowa, on October 12.

"Progress of the Missouri University Medical School and Hospitals" was discussed by **Roscoe L. Pullen**, M.D., Columbia, as a guest speaker at a University Club meeting in Columbia on October 8.

Named as one of the members of a newly created advisory committee on research to the Veterans Administration was **Carl A. Moyer**, M.D., St. Louis.

The Saline County court has appointed **C. L. Lawless**, M.D., Marshall, to serve as county physician.

When **James R. Bridges**, M.D., Kahoka, received his application papers as usual from the Fifth Army headquarters for reserve commission, he offered to serve "for the rest of my life." Dr. Bridges was 92 on October 19. He was interviewed by an official of the Army headquarters of the St. Louis District and pictures of Dr. Bridges were taken.

New president of the St. John's Hospital, Springfield, staff is **T. E. Ferrell**, M.D., Springfield. President-elect is **W. R. Langston**, M.D., and other officers are **Dallas Anthony**, M.D., secretary; **M. D. Bonebrake**, M.D., treasurer; **Robert D. Duncan**, M.D., chairman of surgical service, and **E. E. Glenn**, M.D., chairman of the medical sections.

Two new members of the State Hospital Advisory Council and four incumbent members were appointed by Gov. Phil M. Donnelly recently. The new appointments are **F. Gregg Thompson, Jr.**, M.D., St. Joseph, and James D. Hicks, D.O., St. Louis. The incumbents are Mr. M. R. Kneifl, St. Louis; Mrs. Pearl Palmer, Ethlyn; **Arthur D. Markel**, M.D., Poplar Bluff, and Mr. L. O. Wallis, Springfield.

At a meeting of the Doctors' Medical Foundation on October 18, **Augustin Jones**, M.D., St. Louis, was elected president.

"Allergic Diseases of the External Eye" was the subject of a paper presented by **H. B. Stauffer**, M.D., Jefferson City, before the Allergy Section of the American Academy of Ophthalmology and Otolaryngology in Chicago on October 14.

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Speaking at a meeting of the Southeast Kansas Medical Society at Pittsburg, Kansas, in September, **Samuel Holtzman**, M.D., Joplin, discussed "Common Skin Disorders."

An annual series of lectures memorializing A. Morris Ginsberg, M.D., who died November 12, 1954, was inaugurated October 26 to 29 at the Menorah Medical Center, Kansas City.

The Southwest Missouri chapter of the American College of Surgeons elected **Durward G. Hall**, M.D., Springfield, president, at a meeting in Joplin on October 20.

The Central Society of Nuclear Medicine recently elected **George E. Thoma**, M.D., St. Louis, to its board of governors for a term of three years.

At the Western Division of the American Psychiatric Association, meeting in San Francisco, **Milton Kirkpatrick**, M.D., Kansas City, acted as chairman of the Section of Child Psychiatry.

"Problems of Middle Life" was discussed by **James E. Keeler**, M.D., Kansas City, at a meeting of the Kansas City Young Matrons on November 7.

The Kansas City Club President's Round Table recently elected **Lawrence P. Engel**, M.D., Kansas City, as vice chairman.

The Joint Blood Council, established on November 1 by the American Association of Blood Banks, the American National Red Cross, the American Medical Association, the American Hospital Association and the American Society of Clinical Pathologists, has announced the appointment of Frank E. Wilson, M.D., as executive vice president and secretary. Dr. Wilson was formerly with the Washington Office of the American Medical Association.

Dedication services of New Lutheran Hospital were held at the hospital in St. Louis on November 13 at 3:00 p.m. The Rev. J. W. Behnken, president of the Lutheran Church-Missouri Synod, was speaker.

The Missouri Division, American Cancer Society, meeting in Jefferson City, October 9 and 10, elected **Joseph L. Fisher**, M.D., St. Joseph, president. Among members elected to the executive committee for a one year term were **Edwin C. Ernst**, M.D., St. Louis; **Claude J. Hunt**, M.D., Kansas City; **Thomas W. Martin**, M.D., St. Louis; **E. Kip Robinson**, M.D., Kansas City, and **Everett D. Sugarbaker**, M.D., Jefferson City.

"The Highlights of Civil Defense" was the subject of a talk by **Carroll P. Hungate**, M.D., Kansas City, before the South Central Business Association in Kansas City recently.

Speaker at the Boonville Rod and Gun Club on October 17 was **William A. Sodeman**, M.D., Columbia.

Women representing fifty service organizations at Union were addressed by **Henry E. Oppenheimer**, M.D., St. Louis, on October 18. He spoke on "Diabetes."

The Woman's Club of Hannibal were addressed by **Sam T. Ellis**, M.D., Hannibal, on October 18. His subject was "Know Your Community Affairs."

The Livingston County Tuberculosis Association elected **V. D. Vandiver**, M.D., Chillicothe, president at a recent meeting.

A.M.A. COMMITTEE TO REVIEW FUNCTIONS OF JOINT COMMISSION ON ACCREDITATION OF HOSPITALS

In June, 1955, the House of Delegates of the American Medical Association authorized the Speaker to appoint a committee ". . . to review the functions of the Joint Commission on Accreditation of Hospitals. . . ." and ". . . to make an independent study or survey and report its findings and recommendations to the House of Delegates at the next annual meeting. All physicians and hospitals are urged to pass on to this special committee any observations or suggestions concerning the functioning of the Joint Commission on Accreditation of Hospitals."

This Committee was appointed and, now, in undertaking the task assigned to it, is seeking to obtain from physicians and others their observations concerning the functioning of the Joint Commission.

The Committee is interested especially in the following:

1. The general understanding by physicians of the functions of the Joint Commission.
2. Whether the method of appeal from an adverse ruling regarding accreditation is satisfactory.
3. The effect on the individual physician's hospital connections due to actions of the Joint Commission.
4. Whether any organizations not now represented should have official representation on the Joint Commission.
5. The effect of the Joint Commission's requirements concerning such matters as staff meetings.
6. The pros and cons of separating administrative and professional accreditation functions in the inspection of hospitals.
7. Constructive suggestions for improving the hospital accreditation program.

Any comments from individual members or state and county societies should be addressed to: W. C. Stover, M.D., Chairman, Committee to Review Functions of Joint Commission on Accreditation of Hospitals, 535 North Dearborn Street, Chicago 10, Illinois.

These comments should reach the chairman not later than January 15, 1956. The committee is composed of: W. C. Stover, M.D., Chairman, Boonville, Ind., John F. Burton, M.D., Oklahoma City, Okla., Gerald D. Dorman, M.D., New York, N. Y., George F. Gsell, M.D., Wichita, Kansas, Eugene F. Hoffman, M.D., Los Angeles, Calif., T. C. Terrell, M.D., Fort Worth, Texas, George Unfug, M D., Pueblo, Colorado.

Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Grand River Medical Society

The Grand River Medical Society met October 13, at the Strand Hotel, Chillicothe. About fifty sat down to the fine dinner. The visitors were introduced, including president, Mrs. Frank B. Leitz, Kansas City, and president-elect, Mrs. Charles T. Shepard, Clayton, of the Woman's Auxiliary to the Missouri State Medical Association. After dinner, the Auxiliary retired and had an interesting meeting.

The scientific program was presented by Dr. C. K. Ness, St. Joseph, chairman, Missouri Society of Anesthesiologists' Committee on Postgraduate Education and a member of the Missouri State Medical Association Committee on Anesthesiology, who discussed "Recent Trends in Anesthesia." This was a fine scientific paper followed by discussion and questions.

The transfer card of Dr. Gladys P. Sutherland, Bethany, was presented to the Society, and she was elected by unanimous vote. President Dr. Watkins A. Broyles welcomed Dr. Sutherland to the society.

The minutes of the last meeting were read and approved with some time spent in discussing the Jenkins-Keogh Bill. There being no further business, the Society adjourned.

E. A. Duffy, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

W. F. FRANCKA, HANNIBAL, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

Dr. W. A. Sodeman, professor and chairman of the Department of Internal Medicine of the University of Missouri Medical School, spoke before a dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society at the Woodland Hospital, Moberly, Thursday night, October 13. He discussed the subject "Atherosclerosis" and illustrated his lecture with slides. This was an interesting discussion and unusually well received by those present, which numbered twenty-two.

W. D. Chute, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

JOSEPH C. CREECH, TROY, COUNCILOR

Lincoln-St. Charles County Medical Society

A dinner meeting of the Lincoln-St. Charles County Medical Society was held Thursday night, October 27, at the Southern Air in Wentzville.

The program for the evening was furnished by the Missouri Division of the American Cancer Society. Mrs. Roy Schaffer of St. Charles, chairman, St. Charles County Chapter, Missouri Division of the American Cancer Society, discussed "Services Available to Doctors from the American Cancer Society."

Following Mrs. Schaffer's talk, the film, "Carcinoma of the Prostate," was shown and discussed.

W. H. Poggemeier, M.D., *Secretary*

Jefferson County Medical Society

A meeting of the Jefferson County Medical Society was held Friday night, October 7, in the County Health Unit Building in Hillsboro.

Dr. Karl McKinstry, vice-president, presided. Other doctors present were: Drs. Logan Mayfield, John W. Daake, R. H. Donnell, Bertlan Bolgar, Carl Rice, John F. Rutledge.

The scientific program consisted of an illustrated talk on "Pigments" by Dr. William J. Harrington of the Hematology Department of Washington University Medical School.

The Society went on record as favoring the purchase of a Photoroentgen Unit by the Jefferson County Tuberculosis Society, to be installed in the new Jefferson County Memorial Hospital, when it is finished. This will be used to take chest films on each patient admitted to the hospital, at a cost to the patient of $2.00.

John F. Rutledge, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

J. LOREN WASHBURN, VERSAILLES, COUNCILOR

Audrain County Medical Society

E. Lee Dorsett, M.D., St. Louis, was the guest speaker at the October 17 dinner meeting of the Audrain County Medical Society at the Audrain County Hospital, Mexico.

Dr. Dorsett gave the scientific presentation.

Following introduction by Society president, Dr. Ben Jolly, Dr. Dorsett spoke on "Indications for Hysterectomy." An informal discussion period followed his talk.

Dr. J. O. Helm, New Florence, and Ray McIntyre, Field Secretary, Missouri State Medical Association,

The speaker answered questions after his formal talk.

were guests. Dr. Edgar S. Wallace was unanimously voted to Society membership by transfer.

A total of sixteen attended this meeting.

T. L. DWYER, M.D., *Secretary*

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

West Central Missouri Medical Society

A panel discussion, "The Major Causes of Maternal Mortality with Special Reference to Western Missouri," was presented to members of the West Central Missouri Medical Society at their dinner meeting in Butler on Thursday night, October 13.

This program was a joint sponsored affair by the Missouri Academy of General Practice, the Committee on Maternal Welfare of the Missouri State Medical Association and the Kansas City Gynecology Society.

Those participating on the panel were: James E. Keeler, M.D., Gerald L. Miller, M.D., Kenneth S. Nicolay, M.D., and William C. Mixson, M.D., all of Kansas City.

This was one of the most interesting and practical programs presented before the Society.

A. L. HANSEN, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Mid-Missouri Medical Society

J. Eugene Lewis, Jr., M.D., Assistant Professor of Surgery, St. Louis University Medical School, spoke before a dinner meeting of the Mid-Missouri Medical Society at Salem Thursday night, October 20. He discussed the subject "Problems of Diagnosis and Treatment in Acute Cholecystitis."

A good turnout of doctors and their wives were present to enjoy this entire meeting occasion.

M. K. UNDERWOOD, M.D., *Secretary*

South Central Counties Medical Society

The South Central Counties Medical Society met for dinner Wednesday night, October 26, at the City View Cafe in Mountain Grove with the following members and visitors present: Drs. R. W. Denney, H. G. Frame and A. C. Ames, West Plains; C. W. Cooper, Thayer; W. A. German, Springfield, and the wives of several of them.

After dinner, the ladies went home with Mrs. Denney for the evening.

The reading of the minutes of the last meeting was dispensed with, as there were no minutes kept for the last three meetings at Thayer, West Plains and Houston since the secretary was not able to be present.

The application for membership of Dr. J. L. Spears of Cabool was presented and referred to the censors and left over until the next meeting for action.

Dr. German then spoke on "Endometriosis," a talk which was appreciated by all.

The meeting was then adjourned to meet in Cabool on November 23.

A. C. AMES, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Mineral Area County Medical Society

A meeting of the Mineral Area County Medical Society was held Thursday night, October 27, at the State Hospital in Farmington.

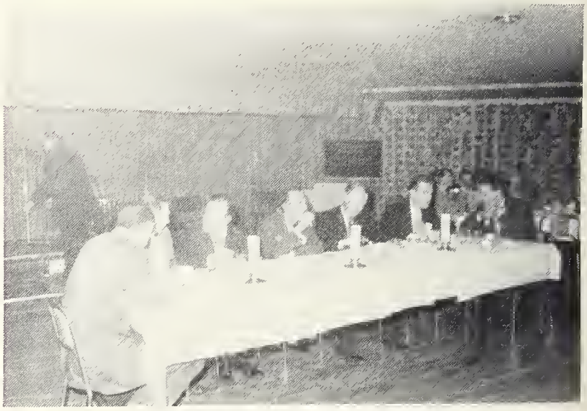
The program for the evening was furnished by the Missouri Academy of General Practice. E. A. Smolik, M.D., neurosurgeon, St. Louis, spoke on "Neurological Problems Complicating Pregnancy." Dr. Smolik gave an interesting presentation of this unusual subject.

C. E. CARLETON, JR., M.D., *Secretary*

Cape Girardeau County Medical Society

The Second Annual Southeast Missouri Cancer Conference, sponsored by the Cape Girardeau County Medical Society in cooperation with the Missouri Division of the American Cancer Society, Missouri State Medical Association and the Missouri Academy of General Practice, was held at the Southeast Missouri State College in Cape Girardeau on Thursday, October 6.

More than 100 physicians attended this Conference, including afternoon and evening sessions.



Panelists were seated together.

The conference was well attended.

The program began at noon with a "get-acquainted" luncheon, presided over by Dr. E. F. McDonald, president of the Cape Girardeau County Medical Society.

The afternoon Clinical Session was held in the Kent Library of the State College. Speakers appearing on the Clinical Session were: John F. W. King, M.D., Director, Service Section, Medical and Scientific Department, American Cancer Society, New York; W. H. Remine, M.D., Surgical Staff, Mayo Clinic, Instructor in Surgery, University of Minnesota Medical School; M. B. Dockerty, M.D., Consultant and Head, Surgical Pathology Section, Mayo Clinic, Professor of Pathology, University of Minnesota Medical School; John F. Dillon, M.D., Assistant Radiologist, Anderson Hospital and Tumor Institute, Houston, Texas; Eugene M. Bricker, M.D., Associate Professor of Clinical Surgery, Washington University School of Medicine, St. Louis, and R. D. Brasfield, M.D., Instructor in Experimental Surgery, Sloan-Kettering Institute and Attending Surgeon, Pack Medical Group, New York.

The speakers had the close attention of the audience.

The evening session of the Conference was held at the "Purple Crackle" on the Illinois side of the river, just across the bridge from Cape Girardeau.

A cocktail hour initiated the evening session followed by dinner and the evening scientific program.

The evening Clinical Session consisted of a presentation of cases by the Southeast Missouri Tumor Diagnostic Staff with evaluation by the guest speakers.

Many fine comments were expressed by those in attendance on the high quality of this Second Southeast Missouri Cancer Conference.

L. R. Seabaugh, M.D., *Secretary*

THE COUNCIL

The Council met at the Sheraton Hotel, St. Louis, on July 31, W. S. Sewell, M.D., Springfield, Chairman, presiding. Those present were Drs. Sewell, Donald M. Dowell, Chillicothe; W. F. Francka, Hannibal; R. O. Muether, St. Louis; Joseph C. Creech, Troy; J. Loren Washburn, Versailles; J. H. Summers, Lebanon; Ben M. Bull, Ironton; Victor B. Buhler, Kansas City; Carl F. Vohs, St. Louis; Jerome I. Simon, St. Louis; Hollis Allen, St. Louis; Henry Allen, St. Louis; Messrs. Ed Schneider, Ray McIntyre, T. R. O'Brien, St. Louis.

COMPREHENSIVE CONTRACT

The Council met briefly to consider the proposed comprehensive contract being developed by the Blue Shield and Blue Cross Plans.

MISSOURI MEDICAL SERVICE

The Councilors were guests at a regular board meeting of Missouri Medical Service.

MEETING OF AUGUST 28

The Council met at the Sheraton Hotel, St. Louis, on August 28, W. S. Sewell, Springfield, Chairman presiding. Those present were Drs. Sewell, W. F. Francka, Hannibal; R. O. Muether, St. Louis; Joseph C. Creech, Troy; C. G. Stauffacher, Sedalia; Richard H. Kiene, Kansas City; J. H. Summers, Lebanon; Ben M. Bull, Ironton; Victor B. Buhler, Kansas City; Carl F. Vohs, St. Louis; E. Royse Bohrer, Jefferson City; Joseph C. Peden, St. Louis; Daniel L. Sexton, St. Louis; Edward Kraft, St. Louis; Messrs. John W. Noble, Kennett; Ed Schneider, Lemoine Skinner, T. R. O'Brien, St. Louis.

MISSOURI MEDICAL SERVICE

The Council discussed the progress and received reports on the work of the comprehensive contract developed by the Blue Shield and Blue Cross Plans.

The present situation was discussed and on motion, properly seconded, it was voted that the Council go on record as approving the steps taken by the Board of Blue Shield to attempt to work out an amicable solution to the problem of the comprehensive certificate and express appreciation to Dr. Vohs for his untiring efforts on the part of the medical profession and in the care of the patient.

The following resolution was unanimously adopted:

The Council of the Missouri State Medical Association by unanimous vote affirms that radiologic, pathologic, anesthesiologic and physiatric services are medical services in the same degree as all other phases of the practice of medicine.

The Council further affirms that Blue Cross and Blue Shield are to be commended for their initial joint action to provide these services more completely to the public by development of companion comprehensive programs under which these medical services (with the exception of routine laboratory services) would have been provided by Blue Shield and hospital services by Blue Cross.

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The action of Blue Cross on July 20, 1955, in redefining radiologic, pathologic, anesthesiologic and physiatric services as hospital services and incorporating these services into a Blue Cross hospital certificate violates the spirit of partnership that has existed for ten years between Blue Cross and Blue Shield, ignores the essential medical nature of the services and offers to the public a program of protection far less adequate than the joint Blue Cross-Blue Shield certificate now proposed by Blue Shield. This proposed certificate preserves the essentials of the broad program originally agreed to by Blue Cross and Blue Shield. It complies with all the specific conditions which Blue Cross has said are required for sales and other reasons.

The Council believes the pattern of partnership between Blue Shield and Blue Cross for the protection of the public must be preserved. The basis of that pattern is that Blue Shield be responsible for medical services and Blue Cross be responsible for hospital services.

MEETING OF OCTOBER 29, 30

The Council met at the Mark Twain Hotel, Hannibal, on October 28 and 29, W. S. Sewell, M.D., Springfield, Chairman, presiding. Those present were Drs. Sewell, Donald M. Dowell, Chillicothe; W. F. Francka, Hannibal; R. O. Muether, St. Louis; Joseph C. Creech, Troy; J. Loren Washburn, Versailles; Richard H. Kiene, Kansas City; J. H. Summers, Lebanon; Ben M. Bull, Ironton; Victor B. Buhler, Kansas City; Carl F. Vohs, St. Louis; Jerome I. Simon, St. Louis; E. Royse Bohrer, Jefferson City; James R. Amos, Jefferson City; Messrs. John W. Noble, Kennett; Lemoine Skinner, St. Louis; Ray McIntyre, St. Louis; Tom R. O'Brien, St. Louis.

AMERICAN MEDICAL EDUCATION FOUNDATION

It was reported that the President's page in MISSOURI MEDICINE on the American Medical Education Foundation and the follow-up letter had obtained good results.

EDUCATION WEEK

An announcement by the American Medical Association that the week of April 23-29 would be termed Medical Education week was announced and it was suggested that Dr. James Murphy, chairman of A.M.E.F. for Missouri also be named chairman of this.

OPTOMETRIC ASSOCIATION REQUEST

A letter from the Optometric Association was presented and it was referred to the Committee on Conservation of Eyesight. Because of the illness of the Chairman of that Committee, it was decided that Dr. Theodore Sanders, St. Louis, be asked to serve as acting chairman for the purpose of calling a meeting of the Committee.

WOMAN'S AUXILIARY

A note of thanks to Dr. Sewell for his talk at the fall board meeting of the Woman's Auxiliary and to the Association for courtesies shown was read.

BOY SCOUTS DRIVE

Request for endorsement of a Boy Scouts' drive for funds made by Dr. Durward G. Hall, Springfield, was presented and on motion of Dr. Summers, endorsement was voted.

TREASURER'S REPORT

Dr. Simon reported on the finances of the Association, stating that the financial position was satisfactory.

BUDGET COMMITTEE

The following Budget Committee was appointed by the Chairman and approved: Drs. Simon, Vohs, Buhler, Bull and Sewell. It was decided that the committee would meet on the evening prior to the next Council meeting, which probably will be held December 11.

FIELD SECRETARY'S REPORT

Mr. McIntyre reviewed meetings since the last Council meeting including county society meetings for which speakers had been furnished, special meetings he had attended as the Missouri Health Council, the Woman's Auxiliary fall board meeting, the Cancer Conference at Cape Girardeau, Association committee meetings; he reported on the exhibit at the State Fair and on several groups to which he had spoken. He reported on physicians who had located in outstate Missouri, at Moberly, Mexico, Marshall, St. Charles, Clarksville, Portageville and Bourbon. He called attention to the program set up for the year by the Greene County Medical Society, which included socio-medical subjects and suggested that more such programs be planned throughout the state. This was discussed by most of the Councilors present, it being the consensus of opinion that it was an excellent plan, but presents difficulties in carrying out because of the drain on manpower to furnish it and the apathy of the profession in wanting it. No action was taken but it was the feeling that all avenues possible should be used in informing the membership on socio-economic medical matters.

COMMITTEE ON ALCOHOLISM

A report of the Committee on Alcoholism was presented and on motion of Dr. Buhler was approved.

COMMITTEE ON LABORATORY MEDICINE

A portion of the report of the Committee on Laboratory Medicine was presented. It was pointed out that this had been referred to the Conference on Patient Care, which would give a later report. On motion of Dr. Dowell, the progress report of the Committee was approved in principle.

IMMUNIZATION PROGRAM

Dr. Amos spoke to the Council on the polio immunization program, asking them to be alert for any difficulties in carrying out the recommendations of the Committee on Infant and Child Care. He said that the first vaccine that had come through recently was released through regular drug channels, and that now about 50,000 cc. was retained for clinic use. The use of the free clinics which will be set up, the lack of demand on physicians in private practice for immunizations and their overstock of vaccine was discussed. It was pointed out that possibly the federal money was not needed by the state and Dr. Amos called attention to the criticism there would be if any children were not vaccinated in the face of funds being turned back. It was agreed that in view of the amount of vaccine available and the lack of demand, that age priorities should not be as restrictive. Dr.

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Bumbalo, T. S., Gustina, F. J., and Oleksiak, R. E.: J. Pediat. 44:386, 1954.

White, R. H. R., and Standen, O. D.: Brit. M. J. 2:755, 1953.

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Brown, H. W.: J. Pediat. 45:419, 1954.

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Amos was told he could use some county contacts that had been set up previously.

HOSPITAL LICENSING LAW

Dr. Amos presented problems in connection with the hospital licensing law. He suggested that more time be given to hospitals to comply with the standards set up. In connection with the hospital licensing law, the Hill-Burton plans were discussed and the diagnostic and treatment facilities that have been added, for which $118,000 is appropriated at the present time. It was felt that these were needed in few, if any, places but Dr. Amos pointed out that this was tied in with all Hill-Burton money and could not be turned back if the rest of the funds were not. Dr. Amos felt that there was no urgency at the moment but felt the Council should be conversant with the subject.

TRACHOMA PROGRAM

Dr. Amos said there had been difficulty in getting the trachoma program outlined as he felt it should be but that progress was being made in the program at present.

NATIONAL LEGISLATION

Attention was called to House Resolutions 9 and 10, allowing tax deductions to physicians for annuity insurance plans, it being pointed out that the A.M.A. has favored the resolutions and that they have a fair chance of passage.

H. R. 7225, cash disability payments to individuals totally and permanently disabled at age 50 was discussed, the trend toward socialized medicine, the increasing cost being stressed. Mr. O'Brien, Mr. McIntyre and Mr. Skinner told of A.M.A. meetings on this bill and the campaign the A.M.A. is planning. It was brought out that it is difficult to totally oppose such a measure and that probably the best method was to stress the rehabilitation phase. This will be discussed at the Boston A.M.A. session, Representative Tom Curtis of Missouri and Senator Byrd of Virginia having been asked to speak on it; also suggested materials in opposing the measure by the A.M.A. will be available by the time of the next Council meeting. On motion of Dr. Muether, Mr. Skinner was asked to write Dr. Lull, over the signature of the Council Chairman, relative to the material being prepared by the A.M.A.

JOINT LICENSURE BILL

It was stated that the Council had appointed the same committee on the study of the joint licensure bill but that the committee had not met as yet and would appreciate advice from the Council. It was pointed out that the A.M.A. House of Delegates declined the Cline report; also situations in several states were reviewed. It was felt that the committee should study further for any possible change and it was agreed that any change would have to be presented to the House of Delegates.

COMMITTEE ON INFANT AND CHILD CARE

Dr. Daniel B. Landau, Chairman, presented minutes and recommendations of the Committee on Infant and Child Care, the recommendations having been sent by the President to the members. He said that since the report Dr. Belden of the Division of Health had suggested that the ages include 1 to 14. Dr. Landau reported also on the Conference on Physicians and Schools held at Highland Park, October 12, 13 and 14. He pointed out that the conference brought out the need for physicians to make themselves available to schools but also called attention to the possibility of the school going too far in taking the place of the home and that some of the school programs should be promoted slowly and watched closely. On motion of Dr. Bull, the report was accepted.

A.M.A. HOUSE REFERRALS

Attention was called to matters which the A.M.A. House of Delegates had referred to component associations:

(a) the matter of grievance committees, which has been discussed by the Council with the feeling that the Council itself was sufficient to serve as such in Missouri.

(b) Civil Defense, in which Missouri has been more active than most states so far as the medical profession is concerned.

(c) automotive safety, and attention was called to the resolution of the Committee on Fractures. Dr. Kiene told of the study by the College of Surgeons, Committee on Trauma, and that they had found that the automotive industries were conducting greater study in this line than any other group. It was suggested that Mr. Skinner write letters to the Chrysler and Ford corporations approving of their work in this field.

COMMITTEE ON HOSPITAL PHYSICIANS RELATIONS

A report of the Committee on Hospital Physicians Relations was presented and on motion of Dr. Francka, it was accepted. In this connection, Mr. O'Brien reviewed some of the material referred to. He said that St. Louis Blue Shield is offering a new contract with $300 top surgical plan and 70 day hospital stay, not restricted to the yearly basis. He said that Blue Shield is working toward the possibility of a service contract, which was discussed briefly.

COMMITTEE ON EDITORSHIP

Dr. Francka presented the following recommendations of the special committee on editorship, which on his motion was adopted:

"Missouri Medicine has been published under the direction of the special committee, composed of Drs. Muether, Petersen, Francka and Sewell since January 1, 1955. The committee now wishes to make the following recommendations:

"That Dr. Charles R. Doyle, St. Louis, be appointed Editor, effective January 1, 1956, and that several Associate Editors be named to assist with this work.

"Further, that the following Committee on Publication be appointed: (Effective Jan. 1, 1956).

Dr. Charles R. Doyle, St. Louis, Chairman,
Dr. Richard Kiene, Kansas City,
Dr. C. G. Stauffacher, Sedalia,
Dr. R. O. Muether, St. Louis,
Dr. Ben M. Bull, Ironton.

"Every effort should be made by the Editor and his Associates, as well as the Committee on Publication, to improve the scientific content of Missouri Medicine and that the feature columns be continued and expanded if deemed practical."

DIAGNOSTIC AND TREATMENT CENTERS

The report given by Dr. Amos on Saturday on the regulations on diagnostic and treatment centers was further discussed; also the enforcement of the hospital licensing law. It was decided after discussion that the Council rather than a special committee should stay in close touch with the situation on the diagnostic and treatment centers. It was the feeling of the Council that there should be no untoward delay in the enforcement of the hospital licensing law. On motion of Dr. Muether, Mr. Skinner was asked to write Dr. Amos that the feeling of the Council is that the regulations should be complied with.

DR. FRANCKA THANKED

Dr. Sewell spoke for the Council in thanking Dr. and Mrs. Francka for their hospitality to the Council while meeting in Hannibal.

DEATHS

Tripodi, Donald W., M.D., Providence, R. I., a graduate of St. Louis University School of Medicine, 1928; member of the Clay County Medical Society; aged 57; died October 7.

Koch, Otto W., M.D., Brentwood, a graduate of the St. Louis College of Physicians and Surgeons, 1901; honor and charter member of the St. Louis County Medical Society; former vice president and councilor of the Fourth Councilor District of the Missouri State Medical Association; aged 76; died October 28.

Cory, Harriet S., M.D., St. Louis, a graduate of Rush Medical College, 1910; honor member of St. Louis Medical Society; aged 72; died October 11.

Black, Donald R., M.D., Kansas City, a graduate of the University of Kansas School of Medicine, 1916; member of the Jackson County Medical Society; aged 67; died November 3.

ST. LOUIS PHYSICIANS' ORCHESTRA

The St. Louis Physicians Orchestra, under the direction of Mr. Edward Ormond of the St. Louis Symphony Orchestra, will present a concert at the St. Louis Medical Society Building, St. Louis, on Monday, December 5, at 8:30 p.m.

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News From the Medical Schools

UNIVERSITY OF MISSOURI

TRIPS AND TALKS

The Faculty of Medicine at the University of Missouri continues to meet the demands upon its time and talents by speaking at various meetings, participating in workshop gatherings and other activities, in addition to regular duties at the School of Medicine.

During the week beginning October 16, Dr. M. D. Overholser, Professor and Chairman of the Department of Anatomy, participated in a Workshop on Anatomy Teaching at the annual meeting of the Association of American Medical Colleges, held at the New Ocean House in Swampscott, Massachusetts. Dr. Edward Lowrance, of the Department of Anatomy, attended the inauguration on October 15 of Robert L. D. Davidson as President of Westminster College in Fulton, Missouri, as an official delegate of Westminster College in Salt Lake City, Utah.

Dr. W. A. Sodeman, Professor and Chairman of the Department of Medicine, was guest speaker at a meeting of the Mississippi Valley Medical Society which was held September 30 at St. Louis. Approximately one hundred physicians heard Dr. Sodeman's talk on "Biliary Disease."

During the period October 14 to 18, Dr. Frank B. Engley, Jr., Professor and Chairman of the Department of Microbiology, helped edit microbiology teaching films being developed at the University of Texas Medical Branch. He also acted as a consultant on laboratory technics in microbiology at the VA Center in Temple, Texas, and inspected the new Medical Sciences Building at the Southwestern Medical School in Dallas.

In the Department of Obstetrics and Gynecology, Dr. Clarence D. Davis, Professor and Chairman, participated in a program devoted to the study of "Maternal Mortality" at a meeting of the Southeastern Missouri Medical Society held in Kennett on September 27. On September 28, Dr. Davis was in St. Louis at a meeting of the Mississippi Valley Medical Society, where he was a panelist in a discussion of excessive bleeding.

On October 1 to 3, Dr. Robert L. Jackson, Professor and Chairman of the Department of Pediatrics, attended a meeting of the Council on Foods and Nutrition of the American Medical Association. From October 19 to 21 Dr. Jackson was in St. Louis, attending a meeting of the American Dietetic Association. Approximately two hundred dietitians and physicians heard Dr. Jackson's speech on "Dietary Management of Children with Diabetes Mellitus."

Dr. Frederic E. Simpson, Instructor in Pediatrics attended a seminar on "Congenital Heart Disease" at a meeting sponsored by the American Academy of Pediatrics held in Chicago early in October.

On October 13, Dr. Clement E. Brooke, Instructor in Pediatrics, journeyed to the Children's Mercy Hospital in Kansas City and, along with students from the University of Missouri School of Medicine, joined the faculty and students of the medical school at Kansas University for the purpose of making rounds and discussing pediatric cases.

Dr. Roscoe L. Pullen, Dean of the School of Medicine, continues in his efforts to apprise interested organizations and clubs of the progress of Missouri University Medical School and University Hospitals. On September 27, he addressed the Franklin-Gasconade-Warren County Medical Society; on October 8, the University Club; and on October 14, the Rolla Rotary Club. During the week beginning October 16, Dr. Pullen attended the Dean's Meeting at the annual meeting of the Association of American Medical Colleges held at Swampscott, Massachusetts.

WASHINGTON UNIVERSITY

APPOINTMENTS AND HONORS

Dr. Oliver H. Lowry, professor of pharmacology and head of the department at the Medical School since 1947, recently was named dean. Dr. Lowry, whose appointment was effective immediately, will continue in his posts in the department of pharmacology. He succeeded Dr. Carl V. Moore who resigned in June. Dr. Moore now is Busch professor of medicine and head of the department.

Dr. Saul Rosenzweig, professor of medical psychology, recently was elected national representative of the American Psychological Association to the International Group for the coordination of Psychiatry and Psychological Methods.

Dr. William H. Olmsted, associate professor emeritus of clinical medicine, has been reappointed vice chairman of the national committee on diabetes detection and education. He also was elected to a fourth term as treasurer of the American Diabetes Association.

Dr. S. Richard Silverman, professor of audiology and director of the Central Institute for the Deaf, recently was awarded the honors of the American Speech and Hearing Association. The award was made "in recognition of a career distinguished in the fields of administrative, scholarly achievement, unstinting effort for the advancement of services to handicapped people, and loyal assistance to our organization."

MEETINGS

Four research papers were presented at the first meeting of the school year of the Washington University Medical Society Oct. 19. The papers were: "Myocardial Infarction: Changing Sex Ratio and Other Factors," by Dr. Kyu Taik Lee, Life Insurance medical research fellow in pathology; and Dr. Wilbur A. Thomas, assistant professor of pathology; "The Site of Action of High Blood Levels of Thyroxine and Stilbesterol in Bringing About Inhibition of the Thyroid Gland," by Dr. Seymour Reichlin, instructor in medicine and Lowell M. Palmer, senior fellow in neuropsychiatry; Dr. G. W. Harris, professor of physiology, Institute of Psychiatry, University of London; and Dr. Keith Brown-Grant, research associate, Institute of Psychiatry, University of London; "Serum Lactic Dehydrogenase Activity of Induced and Transplanted Tumors," by Dr. Kuang-Mei Hsieh, research assistant in cancer; Dr. Valentina Suntzeff, research associate in cancer; and Dr. Edmund V. Cowdry, director of the Wernse Laboratory of Cancer Research; and "The Histological Effects of Intense Sound on the Inner Ear," by Dr. Walter P. Covell, associate professor of anatomy and of otolaryngology; and Dr. Donald Eldredge, research assistant in otolaryngology.

Thirty members of the Southern California Chapter of the American College of Surgeons held a meeting at the Washington University-Barnes Medical Center Oct. 26-28 at which research being done in some of the departments at the Medical Center was discussed. Hosts for the meeting were members of the department of surgery at Washington University, headed by Dr. Carl A. Moyer, chairman of the department. The meeting preceded the 41st annual clinical congress of the American College of Surgeons held Oct. 31 through Nov. 4 in Chicago.

Several staff members of the Medical School were among the speakers for the 20th annual meeting of the Mississippi Valley Medical Society held Sept. 28-30 in St. Louis. Included were Drs. Robert W. Bartlett, assistant professor of clinical surgery; Vilray P. Blair, Jr., assistant in clinical orthopedic surgery; Eugene M. Bricker, associate professor of clinical surgery; Joseph C. Edwards, instructor in clinical medicine; Heinz Haffner, assistant professor of clinical surgery; Carl G. Harford, associate professor of medicine; and W. Stanley Hartroft, professor of pathology and head of the department. Others were: Drs. John E. Hobbs, associate professor of clinical obstetrics-gynecology; William B. Kountz, assistant professor of clinical medicine; Otto S. Krebs, assistant professor of clinical obstetrics-gynecology; William H. Masters, associate professor of obstetrics-gynecology; Paul F. Max, instructor in clinical obstetrics-gynecology; H. Mitchell Perry, instructor in medicine; Henry A. Schroeder, associate professor of medicine; Carl Wattenberg, assistant professor of clinical genitourinary surgery; and George Wulff, Jr., assistant professor of clinical obstetrics-gynecology. Dr. Edwards had a scientific exhibit on the "Management of Hypertension" at the meeting. This exhibit also was shown at the recent meeting of the American Heart Association in New Orleans.

DEDICATION

Formal dedication ceremonies and a two day scientific program for the new Renard Hospital, psychiatric unit of Washington University-Barnes Medical Center, were held Oct. 10-11 at the Medical Center. The general topic for the scientific program was "Newer Aspects of the Theory, Etiology and Treatment of the Psychoses." Speakers included: Dr. Alan Gregg, vice president of the Rockefeller Foundation; Drs. Stanley Cobb, Bullard professor emeritus of neuropathology; Alfred H. Stanton, associate professor of psychiatry, and George Saslow, professor of clinical psychiatry, all of Harvard Medical School. Others were: Dr. John C. Whitehorn, Henry Phipps professor of psychiatry at the School of Medicine at Johns Hopkins University; Dr. F. C. Redlich, professor of psychiatry at Yale University School of Medicine, and B. F. Skinner, professor of psychology at Harvard University.

TRIPS AND TALKS

Dr. Carl V. Moore, Busch professor of medicine and head of the department, returned Oct. 14 from a two week foreign lecture tour, after giving speeches in Copenhagen, Denmark; Malmo, Sweden; Oslo, Norway; and Oxford, England. He also recently participated in a symposium on "The Metabolism and Function of Iron" under the auspices of the departments of pediatrics of the University of Oregon, Portland, and the University of Washington, Seattle. The symposium was held Oct. 20-21 in Portland.

Dr. Edward W. Dempsey, professor of anatomy and head of the department, and Dr. James L. O'Leary, professor of neurology, attended the American Medical College Teaching Institute Oct. 18-22 in Swampscott, Mass. They are official representatives to the Institute

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from the Medical School. Dr. Jack Davies, associate professor of anatomy, also attended.

Dr. Theodore Walsh, professor of otolaryngology and head of the department, recently discussed "The Pitfalls in Hearing Testing" at a meeting of the Central Illinois Society of Ophthalmology and Otolaryngology in Bloomington. He also attended meetings of the Otosclerosis Study Group and American Academy of Ophthalmology and Otolaryngology held in Chicago. Others from the department of otolaryngology who attended the Academy meeting were: Drs. Joseph H. Ogura, Walter P. Covell, James B. Costen, Joseph W. West, Harold M. Cutler, A. Chesterfield Stutsman, Morris Davidson, Hallowell Davis and S. Richard Silverman.

Dr. Alexis F. Hartmann, professor of pediatrics and head of the department, was among the speakers at a pediatric seminar held at Le Bonheur Children's Hospital, Memphis, Tenn., Oct. 19-20. He discussed "Carbohydrate Metabolism and Some of its Clinical Disturbances."

VISITORS

Two recent visitors of the department of anatomy were Dr. A. S. Parkes, of the National Institute for Medical Research, Mill Hill, London; and Dr. Koh Hirasawa, head of the Anatomical Institute at Kyoto University, Kyoto, Japan. Dr. Parkes is making an American tour, and Dr. Hirasawa had been attending meetings in Europe. Dr. R. R. Williams, chairman of the William Waterman Fund for the Combat of Dietary Disease, visited the Medical School Oct. 18 and gave a seminar in "Modern Chemistry and World Food Problems."

A recent speaker at the School was Dr. Carl Wegelius, of Stockholm, Sweden, who discussed "Angiocardiography" at a meeting sponsored by the department of radiology. Dr. Perihan Cambel, head of the pathology department for the state hospital in Ankara, Turkey, recently visited with faculty members of the Medical School. Dr. Cambel, who also has charge of the Cancer Institute program with the Ministry of Health in Turkey, conducted research on skin cancer with Dr. Edmund V. Cowdry, director of the Wernse Laboratory of Cancer Research, from 1947 to 1949. A Turkish delegate at the Atoms for Peace conference at Geneva, she founded the Turkish Association for Cancer Research. Recently visiting in the department of medicine were Dr. Edgar Thomson, of Sidney, Australia; Dr. C. Bruce Perry, of Bristol, England, and Dr. Sheila Sherlock, of London. Dr. Sherlock, who is physician and lecturer to the department of medicine at the University of London Postgraduate Medical School, conducted the noon clinic on Oct. 29.

SAINT LOUIS UNIVERSITY

"The Hot Box," a nationwide television show, the eighth in the "Medical Horizons" series was telecast nationwide from the Physiology Department of the Saint Louis University School of Medicine, Monday night, October 31, at 8:30 p.m. over 39 ABC-TV stations (KTVI, Channel 36 in St. Louis).

Dr. Alrick B. Hertzman, Director of the Department, and his research team conducted ABC-TV newscaster Don Goddard through the Physiology laboratories and described the significant experiments taking place on the physiologic effects of heat and cold. Viewers learned that these studies are being used by the United States Air Force in dealing with hot cock-pits and Arctic cold, and also that the information provided by these physiologists is a direct guide to the surgeon when he deals with certain painful diseases of the blood vessels of the arms and legs.

Participants in the show included: Dr. Hertzman, Dr. Iain Ferguson, associate professor of physiology; Dr. K. B. Coldwater, a St. Louis surgeon and his patient, Charles Shute, Caledonia, Mo.; Francis LeClaire, research assistant; Dr. Theodore Cooper, Post Doctorate Fellow; Darrel Davis, research assistant; George Salantai, technician; Bill Hoffman, a University Arts sophomore and six medical student volunteers: Joseph Carron; Wyman Ewing; Garrett Hagen; Thomas Noonan; Raymond Hellweg, and Michael Pozsgay.

Following the telecast Ciba Pharmaceutical Products, Incorporated, and the American Medical Association jointly presented a television award to the School of Medicine for "an outstanding contribution to the public understanding of medicine." The award was presented to Dr. James W. Colbert, Jr., Dean, by Dr. Joseph C. Peden, a delegate to the American Medical Association from the Missouri State Medical Association, and Dr. William T. Strauss, Coordinator of Television for the pharmaceutical firm. The presentation was made in ceremonies at the Chase Hotel where a reception and cocktail party was held for participants in the show and special guests.

Dr. Colbert and Rev. Edward T. Foote, Associate Dean, attended the 66th Annual Meeting of the Association of American Medical Colleges held at the New Ocean Hotel, Swampscott, Mass., October 24-26. Dr. William F. Alexander, Associate professor of anatomy, attended the Association's third teaching session on Anatomy and Anthropology which was held October 18-22.

Dr. James E. Lewis, assistant professor of surgery, attended a meeting of the Mid-Century Surgeon's Club at Mayo Clinic the middle of October. He also spoke before the Mid-Missouri Medical Society at Salem, Missouri, October 29 on "Problems of Diagnosis and Treatment in Acute Cholecystitis."

Dr. C. Rollins Hanlon, Director of the Department of Surgery, delivered two scientific papers before the American College of Surgeons meeting held in Chicago October 31 to November 4. They were titled "Experimental Silicosis: Changes in the Monkey Produced by Arterializing the Lung," and "An Experimental Study of Toxic Factors in Angio-Cardiography." Dr. Hanlon also attended a meeting of the Chest Club held in Chicago October 29.

Dr. Donald Grieff, associate professor of biology, spoke on "The Relationship of Radiation and Viruses and Rickettsia" before students at the Marquette University School of Medicine on October 14. Dr. Grieff also was recently appointed an associate member of the Commission on Rickettsial Diseases of the Armed Forces Epidemiological Board. He will serve as a member of the commission for two years.

Dr. George E. Thoma, instructor in internal medicine at the University and Director of the Radioisotope Laboratory, Firmin Desloge Hospital, has been elected to the Board of Governors of the Central Society of Nuclear Medicine.

Dr. Ewin E. Nelson, professor of pharmacology and Director of the Department, attended a meeting of the Drug Addiction and Narcotics Committee of the National Research Council in Washington, D.C., September 30 to October 1.

Dr. John Cary Gilson, Director of the Pneumoconiosis Research Unit in Wales and expert on lung diseases visited the School of Medicine and lectured in Miller Hall, Firmin Desloge Hospital October 31.

Dr. William F. Kistner, instructor in internal medicine, presented a paper in the Basic Science and Circulation session of the Proceedings of the 28th Scientific Sessions of the American Heart Association held in New Orleans, October 22-24. The paper titled "Bronchospirometric Determinations of Pulmonary Function in Dogs after Complete Unilateral Ligation of the Pulmonary Vein and Artery" was written by Dr. Kistner, Dr. Rollins and Dr. J. Gerard Mudd, instructor in internal medicine.

Dr. Otakar Machek, instructor in orthopedic surgery, spoke on plans for the development of a Youth and Adult Center for Cerebral Palsy Patients before a meeting of the United Cerebral Palsy Association at the Alhambra Grotto Center, St. Louis, October 25.

Philip A. Conrath, associate professor and director of the section of medical illustration, has been elected editor of the *Journal of the Association of Medical Illustrators* for 1955-56. Prof. Conrath served as president of the group for 1954-1955.

Missouri Medicine in Review

(Continued from page 932)

the Mayo Clinic has accepted the appointment as editor-in-chief.

Dr. Karl Landsteiner, New York, bacteriologist and pathologist, who has been a member of the Rockefeller Institute since 1922, has been awarded the Nobel Prize for Medicine. The award was made by the Stockholm Faculty of Medicine, the money grant accompanying the award approximating $48,000. The prize was awarded to Dr. Landsteiner for his discoveries and research in classifying different types of human blood. Dr. Landsteiner was the first to communicate the disease of infantile paralysis from man to monkeys, thus opening the disease to experimental study. Dr. Alexis Carrel, New York City, is the only other American who has been awarded the prize. He received the Nobel Prize for Medicine in 1912.

Dr. John M. Stone, Laredo, a graduate of the College of Physicians and Surgeons, Keokuk, Iowa, 1878, died September 18, aged 81. He was a Fellow of the American Medical Association and a member of the Grand River Medical Society.

TEN YEARS AGO

Each physician practicing in Missouri is required to register biennially with the State Board of Health. This should be done before December 31 of the year preceding the period for which the physician is registering.

Major Charles F. Lowery, Kansas City, has been promoted to Lieutenant Colonel.

Dr. William E. Stone, Boonville, spoke before the Boonville Rotary Club on October 1.

The annual pilgrimage to the grave of William Beaumont in Bellefontaine Cemetery, St. Louis, was made on November 22.

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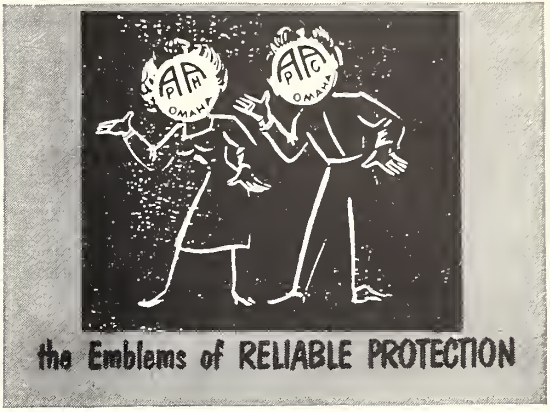

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of antitoxin in adequate doses, according to the November 10 issue of *The Journal of the American Medical Association.*

The Auxiliary to the Dunklin County Medical Society was organized in Kennett on October 24 with eight charter members.

House Bill 402 which would have granted almost equal rights to practitioners of osteopathy as medical doctors now have and in effect would have created by law two examining boards for the practice of medicine was defeated on final passage.

House Bill 291 which provides scholarships for medical students for each of the state's thirty-four senatorial districts has passed the House and is pending in the Senate Committee on Education.

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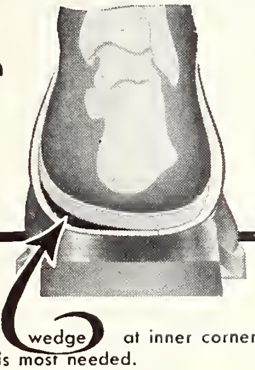

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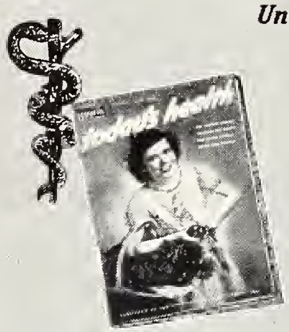

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Report of the Joint Committee on Hospital-Physician Relationships of the Boards of Trustees of the American Medical Association and the American Hospital Association, June 1953

Physician and hospitals are both concerned with rendering medical care. Their first consideration is their desire to promote the welfare of the patient and the community which they serve. Physicians are the individuals who provide medical care—whether it be in the home, the office, or the hospital. With the ever increasing complexity of modern medical care, however, the roll of the hospital in providing an organization and an environment in which the physician may care for patients is assuming increasing importance.

Problems associated with the evaluation of services by hospitals and by physicians are different. It is possible to develop minimum standards in a hospital by which the adequacy, type and quality of hospital service may be measured and compared and the cost per unit of service determined. It is much more difficult to evaluate the services of a physician. Specialty boards have done much to improve the quality of service. Although a specialty board may find that an individual has had good training and that he is capable of carrying out certain procedures, it cannot know what is in his heart and soul, his sense of obligation, or degree of devotion to his duty.

With the increase in size and complexity, care rendered in hospitals tends to become less personal. In an effort to overcome this, hospitals have striven to indoctrinate all associated with them in the desirability of developing a more individual touch. Medicine, on the other hand, by its very nature, is more personal. It is both a healing art and a science. These two cannot be divorced without grave injury to medicine and to the quality of care received by patients both within and without the hospital.

With the rapid advance of the science of medicine in the last fifty years, the importance of the art has been lost sight of by many. The tendency to put faith in the physical attributes of medicine—building, equipment and technicians—has developed to an increasing degree a mechanistic rather than an intellectual and spiritual approach to medicine and its problems. One evidence of this has been an over use of and over dependence on technical procedures in hospitals at the penalty or increased operating costs and possible deterioration in the quality of performance of these technical procedures. This fault does not lie alone at the door of hospitals, since physicians are responsible for the number and type of procedures ordered. It is, however, the result of our present operating procedures and illustrates the failure to integrate adequately the administrative and professional aspects of the hospitals.

On the other hand, the idea that a hospital should be merely a physician's workshop and supply the facilities and tools to allow him to work unhampered by restrictions is untenable. These tools are too numerous, too unwieldy and too expensive. Their use needs the coordinated efforts of many persons—nurses, dietitians, technicians of all kinds—as well as those of a physician or physicians. Their proper use still requires the fine discrimination in their selection and application that only a physician can supply.

The administrator, under the direction of a governing board, has the primary responsibility of running a good hospital in which good medical care is provided. He is concerned with costs, personnel, housekeeping, maintenance and expansion of facilities, as well as with the medical care provided in the institution. It is his responsibility to coordinate into a smooth running whole the multiple activities of his institution. He looks to the board on the one hand and to the professional staff on the other. Because of the nature of his position and his responsibilities, he looks more directly to the board. His worth, however, must be evaluated finally on the basis of how well he maintains a good hospital within available resources.

In order to accomplish objectives, some mechanism must be set up that will bring into frequent and close contact the partners in the hospital endeavor, the administrator, the governing board and the professional staff. It is also necessary that the relationship between physicians and hospitals be clearly defined and, as a guide toward this aim the following principles are recommended:

1. The general purpose of hospitals and physicians to aid each other in the delivery of the best possible medical care to patients. To attain such a purpose requires full cooperation among medical staffs, governing boards and administrative heads of hospitals. One important method of attaining this objective is that duly designated representatives of the medical staff shall have free and direct access to the governing board with due consideration to the position of the administrator as chief executive officer of the hospital. The various methods by which the medical staff may have access to the hospital governing board follow. These methods are not listed in the order of their desirability, and there may be other acceptable liaison plans developed depending on local conditions.

(A) The executive committee of the medical staff and a committe of the governing board with the hospital administrator can serve as a joint committee.

(B) Representatives of the medical staff can serve as members of the medical staff committee of the governing board with the hospital administrator.

(C) Representatives elected by the medical staff can attend meetings of the hospital governing board.

(D) Members of the medical staff can be members of the hospital governing board.

2. The professional evaluation of chiefs of service and members of the medical staff should be the responsibility of the medical profession. The method of selection of these individuals must be subject to local arrangement and local conditions. In any such arrangement, however, the principle of the freedom of the staff to make recommendations, subject to the approval of the hospital governing board, should be recognized.

3. The medical profession and the hospitals recognize that certain special services, such as anesthesiology, pathology, radiology and physical medicine are integral parts of the practice of medicine and of the services necessary for hospital patients. Physicians in these fields should have the professional status of other members of the medical staff. Chiefs in these specialties must assume also the administrative responsibilities and relationships customarily associated with such positions.

4. The right of an individual to develop the terms of his services on the basis of local conditions and needs is recognized, but such contractual arrangements should in all cases ensure (a) the policy of

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This excerpt is reprinted from a pamphlet issued by the Council on Medical Service, American Medical Association.

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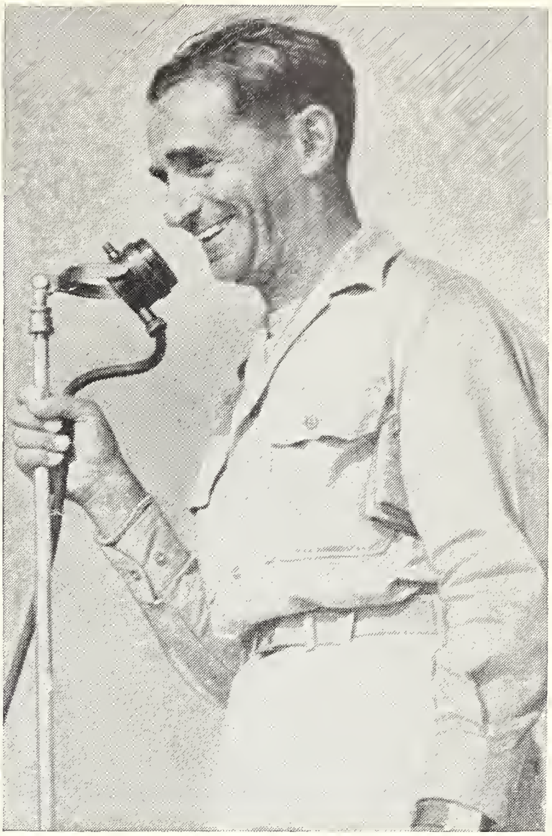

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professional incentive for the physician, and (b) progressive development of the hospital departments involved, in order that increasingly improved services to patients may be rendered. Moreover, a physician shall not dispose of his professional attainments or services to any hospital, lay body, organization, group or individual, by whatever name called, or however organized under terms or conditions which permit exploitation of the patient, the hospital or the physician.

5. The chief of a hospital department may have access to financial information regarding his department.

6. It is desirable that means should be provided at local, state and national levels for review of problems of individual hospital-physician relationship by organized medical and hospital groups.

BOOK REVIEW

THE HEPATIC CIRCULATION AND PORTAL HYPERTENSION, by Charles G. Child, III, M.D., Professor of Surgery, Tufts College Medical School; Chairman, Department of Surgery, New England Center Hospital. In collaboration with Ward D. O'Sullivan, M.D.; Mary Ann Payne, M.D.; George R. Holswade, M.D.; Roger Milnes, M.D.; Arthur L. Gore, M.D.; Daniel M. Hays, M.D.; Roy D. McClure, Jr., M.D.; Helena Gilder, M.D.; Charles S. Harrison, M.D.; David Barr, M.D.; Earl A. O'Neill, M.D. W. B. Saunders Company, Philadelphia. 1954.

Twelve years ago Mann stated that the story of the hepatic circulation is buried under its own literature. In the ensuing years a staggering amount of additional literary material has been added to the previous pile so that the bibliography of the present monograph comprises more than a tenth of its 444 pages. The author and his colleagues are well-known for their work in this field, to which the present volume is a significant and scholarly contribution.

Beginning with his original objective of portraying the normal and pathologic anatomy and physiology of the portal venous system, Dr. Child was led by the close interdependence of the three vascular components to study and present a coherent picture of the entire hepatic circulation. For this he merits the admiration and gratitude of surgeons, physiologists, students and all others who have attempted to separate wheat from chaff in this chaotic field.

After a brief historical background he presents the comparative anatomy of the hepatic circulation followed by its embryology, its structure and its function in health and disease. On such a foundation is based his well rounded discussion of portal hypertension. As a corollary of this there is a chapter on the "extended" pancreatoduodenectomy which includes resection of the portal vein. Much of the work in this field is the author's own and his conclusions are documented by a number of valuable appendices covering laboratory and clinical investigations on hepatic vasculature.

The book is well set-up and adequately indexed. Anyone interested in portal hypertension should have this monograph; it could be profitably consulted by all segments of the profession. C. R. H.

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